CALL for Help:

a study of the use of help facilities and language learning strategies in the context of a Web-based multimedia CALL program.

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Abstract of Thesis

This thesis presents a description of how learners use the help facilities of a Web-based multimedia CALL program designed to foster second language learners' reading and listening skills and language learning strategies.

Relevant literature reviews of three main areas of Applied Linguistics research and theory are first presented: Language Learning Strategies, Second Language Pedagogy and CALL. These have a direct influence on both the program and the research design. A description of the program then follows: **ImPRESSions©** is a Web-based multimedia program intended for self-study to help learners of English in their comprehension skills regarding news in newspapers, on television and radio. The targeted users are learners of English from pre-intermediate to advanced levels. The prototype for the research study targeted Spanish learners. The author of this thesis first designed the program using HTML and JavaScript programming languages based on the capabilities of the computer to interlink different media. Then the need for various help facilities and options was assessed and designed. Help facilities are understood here as the resources of the program which assist the learner in performing language learning tasks. The help facilities in **ImPRESSions** are divided between *Assistance*, those that provide learner help for comprehension of the texts, and *Guidance*, those that are related to the tasks and provide help for performing them. Thus we could state that *Assistance* facilities are related to cognitive strategies whereas *Guidance* facilities are more related to metacognitive strategies. This framework helped to conceptualise the design of the program and enabled the researcher to explore how different learners use the help facilities presented.

This study investigates the variation of strategy use taking into account students' level and their perceived language learning strategy use. In essence this is an exploratory study of strategy use in a CALL environment: 22 adult Spanish students worked with the program for four sessions. In these sessions learners' computer moves were tracked by online video screen recording and retrospective questions were audio recorded after they worked on different written and aural texts. As the emphasis is on the process rather than the product, the description and analysis of the data focus on the observation of the language learning strategies learners deployed when they used the help facilities provided: Dictionary, Cultural Notes, Transcript, Subtitles and Play Controls, Feedback and an Experts module specifically designed to provide the language learner training component of the program.

The qualitative analysis of the results points to the direction that many variables have an influence on the amount and quality of the use of the help provided by the program, from the learners' individual differences to the fact that the CALL environment may prompt learners to behave or work in a different way from conventional learning.

The results of the study provide information for future CALL material design, in particular for the design of help facilities in programs dealing with comprehension skills. The type of research outlined also provides information on other areas of Applied Linguistics research, e.g. SLA, and opens new possibilities for CALL research methods.

We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.

From the poem entitled Little Gidding

T. S. Eliot, (1944)
Four Quartets

Declaration:

In accordance with University of Edinburgh Regulation 3.8.7 of the programme of postgraduate study, I declare that this thesis has been composed entirely by myself, and that the work it contains is my own.

Joan-Tomàs Pujolà

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INTRODUCTION

> "We do not as yet know very much about the extent to which the help and feedback actually contribute to the language development of the average learner. First, there is ample evidence that many, perhaps even most, learners routinely ignore the availability of help materials, even in tasks where we can clearly see that they need them. Second, we do not know when learners do use them, whether that use results in learning (i.e. a change in their knowledge state) or whether it merely helps them over a momentary difficulty, helps them through the task at hand, by providing a bit of information to be used and immediately forgotten again like a number in the phone book. It could even be argued that the easier the help is to access, the more likely it is to be used in this almost absentminded way." (Garrett, 1995:348)

Here Garrett states the very key issues that will be the basis for the study of the thesis being proposed. The aim of this study is to determine how foreign language learners make use of the help facilities in a Web-based multimedia CALL program and how this relates to the learners' use and perceptions of language learning strategies. Thus, the research is concerned with the following three main areas in Applied Linguistics:

- Language Learning Strategies
- Foreign Language Pedagogy
- Computer Assisted Language Learning

Theoretical issues from these fields of knowledge will be reviewed and discussed chronologically in the first three chapters in order to provide the necessary background information on the actual research, and in many cases they will be the springboard for practical implementation in the multimedia CALL program presented. At the end of these chapters, a section called *Implications for the study* will be included and will summarise the relevant points of each chapter which directly influence the design of the program and the research agenda.

A Web-based multimedia CALL program, called **ImPRESSions©** will be described in *Chapter 4* taking into account design and pedagogical issues. This program is a self-study multimedia application that will help learners of English in their comprehension skills regarding news in newspapers, on radio and television. As the focus of this program is on comprehension, issues related to receiving and understanding language will also be discussed within the literature review of the main areas mentioned above. The actual program is

provided on a CD-ROM included in the inside pocket of the back cover of the thesis and is operational using any Internet browser, although it is best viewed in Internet Explorer™. The program works best when it is downloaded from the hard disk of the computer. Thus it is advisable to copy the complete file entitled *ImPRESSions v1.6.99* from the CD-ROM to the hard disk. To access the homepage of the program, simply double-click the file entitled *Impress.html* and the browser will automatically open the homepage. We should point out that this version is only a demo and thus not all the video clips for the Experts module are available.

In *Chapter 5* the research approach will be described and the methodology used to carry out the study outlined. The experimental design consisted of 4 individual sessions using **ImPRESSions** by 22 Spanish adult students and interviews were carried out immediately after they performed their tasks. These sessions were computer-screen-recorded and audio-recorded, and later transcribed for analysis.

The detailed analysis of the data collected is developed in *Chapter 6.* The discussion is essentially exploratory in nature, in that the emphasis is on the process followed by learners working with the program. For practical reasons and due to the amount of data collected it is unfeasible to provide everything in written form. Transcriptions of the answers from the retrospective interview and detailed descriptions of the use of some help facilities discussed in the thesis are also included in the **ImPRESSions** DATA DISK as Word documents. These files have been zipped in an executable file, thus the reader has to click on the only file available *Impressions DATA.exe* to view them, following then the screen instructions. The transcriptions of the answers are written in their original language, Spanish or Catalan, but the references made in the thesis have been translated into English.

Finally, in Chapter 7 a summary of the findings and conclusions is outlined, and implications for future software design and further research are suggested.

Before starting the discussion some terms should be clarified since they have been used inconsistently in the literature. Thus the reader should take care in interpreting these terms due to potentially overlapping meanings:

MULTIMEDIA:

Multimedia, in this study, is understood as "a class of computer-driven interactive communication systems which create, store, transmit and retrieve textual, graphic and auditory networks of information" (Gayeski, 1992). Thus multimedia is used as an umbrella term that covers all the computer-generated media including hypertext and hypermedia. However, in the review of the literature authors use the terms multimedia and hypermedia interchangeably because both reflect common features, such as a combination of two or more media and interactivity via computer. The difference lies in the kind of interactivity: "Hypermedia implied an interlinked and interactive form of information presentation, whereas Multimedia simply implied the physical combination of multiple media for different presentation purposes" (Harland, 1991:147).

STRATEGY

As McDonough (1995) mentions, this concept has been generally used in the language learning literature in four broad categories of meaning:

- an organising principle or policy.
- an alternative to calculation by rule: psychologists refer to strategies as alternative methods used due to problems of memory, knowledge or cognitive overload.
- compensation: to overcome communication breakdown.
- plans for action.

As this concept is very difficult to pin down clearly, if not specified, strategy is used as a general concept consisting of mental or behavioural activity related to some specific stage in the process of acquiring or using a language. (section 2.1 for further discussion).

SKILLS

This term is used here to refer to the various modes of language performance: speaking, reading, writing and listening. It must be noted that in the literature of second language pedagogy considerable terminological inconsistency is displayed regarding the terms "skill" and "strategy". Skills, for example, are sometimes referred to as the sub-skills or micro-skills for reading (Nuttall, 1982).

L2:

L2 could refer to either second or foreign language due to using different studies in both settings. This study, however, will only cover foreign language learning.

Chapter 1
LANGUAGE LEARNING STRATEGIES RESEARCH

In recent years, much interest has been shown in language learning strategies. Early work on learning strategies focused on the good language learner (Rubin, 1975; Stern 1975; Naiman, Fröhlich, Stern & Todesco, 1978). Others concentrated on promoting learner autonomy (Holec, 1981; Dickinson, 1987; Wenden & Rubin, 1987). In the last decade researches have been attempted to provide an empirical basis for learning strategies. (Wenden 1986/7; O'Malley & Chamot, 1990; Oxford, 1990; Cohen, 1998)

Research on learning strategies is, as Skehan (1989:94) points out, still in its infancy, and thus has yielded conflicting findings, which are due to three main factors:

- variations in the concept of learning strategy
- different classifications of strategies
- conflicting methods of research and results.

Despite these problems, in the last decade or so there have been attempts at training language learners in the use of strategies (Wenden, 1987; Oxford & Crookall, 1989; O'Malley & Chamot, 1990; Vann and Abraham, 1990; Nunan 1995; Oxford, 1996; Cohen, 1998). The results of these studies have been varied in their success, but have shown that teachers have to be cautious about implementing strategy training when we still have no clear picture of learners' strategy use. Besides, the applicability of research findings to language learning programs should consider all the variables that determine individual differences such as the learning environment, the cultural background of the students, and many others.

Those three conflicting factors are now described in turn to have an overview of the research undertaken in this area of second language acquisition.

1.1 DEFINING LANGUAGE LEARNING STRATEGY

Reviewing the literature on learning strategies one soon realises the variety of terms used, sometimes even interchangeably, such as tactics, techniques, plans, skills, processes and strategies. There are no exact equivalences amongst them, albeit some authors' attempt

(Stern, 1983; O'Malley and Chamot, 1990) to distinguish them: some terms (such as techniques and tactics) are used to express particular forms of observable learning behaviour and other terms (such as skills or strategies) have more to do with underlying mental processes. This distinction, although useful, is not always applied among authors. The following sample of definitions taken from the literature of learning strategies will reveal other problems.

DEFINITIONS OF (LANGUAGE) LEARNING STRATEGIES

Source	Definition
RUBIN (1975:43)	By strategy, I mean the techniques or devices which a learner may use to acquire knowledge.
STERN (1983:405)	[...] strategy is best reserved for general tendencies or overall characteristics of the approach employed by the language learner, leaving learning techniques as the term to refer to particular forms of observable learning behaviour, more or less consciously employed by the learner.
SELIGER (1984:4) in Ellis (1994:532)	[...] basic abstract categories of processing by which information perceived in the outside world is organised and categorised into cognitive structures as part of a conceptual network.
WEINSTEIN & MAYER (1986) in Ellis (1994:531)	Learning strategies are the behaviours and thoughts that a learner engages in during learning that are intended to influence the learner's encoding process.
WENDEN (1987:19)	Language learning behaviours learners actually engage in to learn and regulate the learning of a second language
RUBIN in Wenden and Rubin. (1987:19)	'Any set of operations, steps, plans, routines, used by the learner to facilitate the obtaining, storage, retrieval and use of information. That is, what learners *do* to learn and *do to regulate their learning*'
CHAMOT in Wenden and Rubin (1987:71)	Learning strategies are techniques, approaches, or deliberate actions that students take in order to facilitate the learning and recall of both linguistic and content area information.
O'MALLEY & CHAMOT (1990:1)	[...] learning strategies, the special thoughts or behaviours that individuals use to help them comprehend, learn or retain new information.
OXFORD (1990:8)	Learning strategies are specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective and more transferable to new situations.

OXFORD (1993:175)	Second Language learning strategies are specific actions, behaviors, steps, or techniques that students employ -often consciously- to improve their own progress in internalizing, storing, retrieving, and using the L2.
MacINTYRE (1994:190)	[...] the actions chosen by language students that are intended to facilitate language acquisition and communication.
COHEN (1998:4)	learning processes which are consciously selected by the learner. The element of **choice** is important here because this is what gives a strategy its special character. These are also moves which the learner is at least partially aware of, even if full attention is not being given to them. (Cohen 1995:5)

Table 1.1

Underlying these definitions we can see that there is no agreement about the following:

- Are strategies to be perceived as behavioural or as mental or as both?
- Are they to be seen as conscious or subconscious?
- What is the actual nature of behaviours for learning strategies: techniques, approaches, actions, plans, processes, or moves?
- What invokes the use of particular learning strategies?

Definitions of learning strategies, or in this case language learning strategies, vary among scholars since some of the dichotomies posed in the questions above are not really either-or questions but in many cases both are applicable. This underlines the first major problem in research on learning strategies. The differences respond to different emphasis and approach depending on the type of research scholars have carried out which make results difficult to compare.

Despite the above disagreements, there are some common features that should help us to understand the concept. Ellis (1994:532) summarises the characteristics of *strategies* taken from different studies on second language learning strategies as follows:

> "1. Strategies refer to both general approaches and specific actions or techniques used to learn an L2.
> 2. Strategies are problem orientated - the learner deploys a strategy to overcome some particular learning problem.
> 3. Learners are generally aware of the strategies they use and can identify what they consist of if they are asked to pay attention to what they are doing/thinking.
> 4. Strategies involve linguistic behaviour (such as requesting the name of an object) and non-linguistic (such as pointing at an object so as to be told its name).
> 5. Linguistic strategies can be performed in the L1 and in the L2.

6. Some strategies are behavioural while others are mental. Thus some strategies are directly observable, while others are not.
7. In the main, strategies contribute indirectly to learning by providing learners with data about the L2 which they can then process. However, some strategies may also contribute directly (for example, memorization strategies directed at specific lexical items or grammatical rules).
8. Strategy use varies considerably as a result of both the kind of task the learner is engaged in and individual learner preferences."

These characteristics portray a broad concept of strategy since Ellis takes into account multiple aspects, some of which are allowed to be in a continuum and not polarised. Taking that approach, *strategy* is a phenomenon with multiple facets which makes it more difficult to pinpoint and thus open to discussion among scholars .

The sample of definitions illustrated in Table 1.1 shows clearly an evolution in the attempt to define this construct. Later definitions are generally refined products of earlier ones modified by the results of the particular researchers' studies. MacIntyre (1994), however, adds a new dimension to the definition of language learning strategies. He highlights the conceptual problem that if we take previous definitions it could be possible that learners may be unaware of strategy use and thus a strategy can occur automatically. This could entail that learner and situational characteristics are likely to be considered strategies when they should be seen as only contributors to the use of strategies (see *point 1.4* below for discussion of individual differences). Thus, he stresses the issue of **intentionality** as central to the strategy concept and points out that "the defining characteristics of language learning strategies are that they: 1) focus on intentional actions and 2) require that the student chooses to perform the strategic action" (ibid:190). However, as Wenden (1987) states, learning strategies: "sometimes [...] may be consciously deployed [e.g. when something new is being learnt]. For certain learning problems, strategies *can become automatized* and remain below consciousness or potential consciousness" (Wenden, 1987: 7 – emphasis in original). The issue of whether learners need to be conscious of the availability of a strategy in order to use it is still controversial.

Another controversial issue found in the literature is the distinction often made between **learning** and **communication** strategies. In the model of interlanguage development introduced by Selinker (1972) strategies for L2 *learning* and *communication* were seen as two main processes (see Cook 1993, Chapter 6 for more detailed discussion). Most research in this area, based on recording and analysis of learners' language (Tarone 1981; Faerch & Kasper, 1983; Ellis 1985, Bialystok 1990), has limited the concept of communication

strategies to strategies used to "overcome obstacles to communication by providing the speaker with an alternative form of expression for the intended meaning" (Bialystok, 1990:35). Learning strategies, however, are restricted to attempts to develop linguistic and socio-linguistic competence in the L2. The problem is that although those two broad kinds of strategies have different purposes, they are difficult to distinguish between. For example, there is no easy way to know whether a language learner uses those strategies moved by a desire to learn or to communicate. Another further distinction is made by some authors (Ellis 1985, Tarone 1981) between learning strategies, production/reception strategies and communication strategies. However, other authors have argued that all these kinds of strategies are impossible to tease apart and often result in learning (Oxford 1990).

In that respect, Little (1996) mentions the inseparability of **language learning** and **language use** pointing out that their relation is bi-directional. *Language use* plays an essential role in *language learning*, whose aim is to promote communicative competence, and at the same time, the capacity to update our communicative repertoire is a prerequisite for successful language use. This close relationship is therefore manifested between learning and communication strategies in that communication strategies themselves may also be effective learning strategies, and 'to the extent that learning strategies foster the development of communicative ability, they necessarily but indirectly promote the development of strategic competence' (ibid:26). The essence is that directly or indirectly language learners acquire strategic competence in their development of communicative competence.

Strategic competence is understood here in a broader sense than the one used to compensate for lack in some language area or breakdown in communication. **Strategic competence** is conceived as ' a set of metacognitive components, or strategies, which can be thought of as higher order executive processes that provided a cognitive management function in language use' (Bachman and Palmer, 1996:70). These strategies include a goal-setting component, an assessment component and a planning component.

Within this broader framework compensatory, e.g. simplification or even avoidance when the exact word escapes, and non-compensatory strategies, e.g. planning how to accomplish a task, are included but it may be still the case that some strategies are conscious and others unconscious. Considering this broader sense Little (1996) underlines that 'strategic competence operates sometimes below and sometimes above the threshold of conscious awareness' (ibid: 33) depending on the type of language task; some demand intentional planning, e.g non-

reciprocal tasks that do not demand an immediate response, and others are performed unconsciously as routinised communication, e.g reciprocal tasks that demand immediate response.

Cohen (1998) introduces a useful concept: **second language learner strategies,** which encompasses both *second language learning* and *second language use strategies*: 'Taken together, they constitute the steps or actions consciously selected by learners either to improve the *learning* of a second language, the *use* of it or both.' (Cohen 1998:5, emphasis in original). We should note that *consciousness* is a decisive factor for Cohen (1998) since 'the element of consciousness is what distinguishes *strategies* from those processes that are not strategic' (ibid:4). *Language learning strategies* include strategies for identifying the material that needs to be learned, distinguishing it from other material, grouping it for easier learning, and memorising it when it does not seem to be acquired naturally. *Language use strategies* include four subsets: retrieval strategies, used to call up language material from storage; rehearsal strategies, for practising target language structures; cover strategies, to create the impression that learners have control over material when they actually do not; and finally, communication strategies, to convey messages that are meaningful and informative to the listener or reader. Cohen (1998) makes the point that communication strategies may or may not have any impact on learning.

In second /foreign language learning, the language *use* element and the language *learning* element are interacting in multiple ways and are paramount to understanding how learners use language learner strategies either to enhance their language learning or use. In both cases, they serve to assist the language learner in improving their communicative competence.

Defining *language learning strategy* is still a matter of discussion, but unification of criteria is needed to make this area of second language research more operational. In the meantime, researchers should find working definitions in order to solve this lack of consensus acknowledging these problems and trying to find possible solutions. A clear example is that of Cohen (1998) who considers five problematic issues in need of clarification and points to some solutions for each one summarised in the following table:

Problematic issues	Possible solutions
The distinction among strategies, substrategies, techniques and tactics	To refer to all of them simply as strategies, while still acknowledging that each strategy has a different level of abstraction from the broadest categories to the most specific.
Strategies as conscious or unconscious	If the behaviour is so unconscious that the learner is not able to identity any strategies associated with it, then the behaviour would be referred to as a *process*, not a *strategy*.
Differing criteria for classifying language learning strategies	Strategies that belong to one type frequently vary on a number of dimensions and the extent to which they are observable. To try to identify the relevant strategies for the given learner in the given context and make an effort to identify non-observable strategy use.
Broadening the concept of strategic competence	The concept should encompass not only compensatory but also non-compensatory behaviour
Linking learning strategies to learning styles and other personality-related variables.	To collect as much as information possible on learning styles, beliefs and attitudes, and social and demographic information about the subjects.

Table 1.2

These solutions, although they are still arguable, make his research operational.

1.2 CLASSIFYING STRATEGIES

Different researchers have identified different strategies and thus different ways of categorising them. Earlier work on classification was devoted to compiling inventories of learning strategies, which differ in many ways.

The main reasons for such different typologies are in the fact that the strategies identified tend to reflect:

- the particular type of learners under study
- the particular interest of the researchers emphasising some aspects more than others
- the particular setting, naturalistic or in the classroom

At the present stage of research, there are still multiple L2 strategy classification systems which suggest the lack of a coherent system to study learning strategies. As Oxford (1993) points out, these can be grouped into five overall categories:

1. Systems related to successful language learners.
2. Systems based on psychological functions such as cognitive, metacognitive and affective.
3. Linguistically-based strategy systems such as inferencing, formal practising and so on or with types of communication strategies like paraphrasing.
4. Systems based on particular language skills such as reading comprehension.
5. Systems based on different types of learners.

These different typologies make research of learning strategies controversial and operationally complicated since results from different investigations are most of the time difficult to compare. There is an urgent need for an agreed framework for contextualising learning strategies and for more effective taxonomies of strategies.

From these attempts of classification we can highlight the work of Rubin, 1987; O'Malley & Chamot, 1990; Wenden, 1991; and Oxford, 1990 which all show an important contribution to our knowledge in this area.

Based on previous research, Rubin (1987) distinguishes three broad kinds of strategies: *learning*, *communication* and *social* strategies. She subdivides the learning strategies into *cognitive* and *metacognitive* stating that both contribute directly to learning. Communication strategies, however, may lead to learning but their relation is less clear and thus less direct. Social strategies contribute only indirectly "since they merely put the student in an environment where practice is possible" (Rubin 1987:27).

RUBIN'S TYPOLOGY	
Learning Strategies	contribute to the development of the language system which the learner constructs and affect learning directly
Cognitive	steps or operations used in learning or problem-solving that require direct analysis, transformation or synthesis of learning material.
Metacognitive	refer to knowledge about cognitive processes and regulation of cognition or executive control or self-management through such processes as planning, monitoring and evaluating.
Communication Strategies	are less directly related to language learning since their main focus is on the process of participating in a conversation and getting meaning across or clarifying what the speaker intended are used when speakers are faced with some difficulty
Social Strategies	those activities learners engage in which afford them opportunities to be exposed to and practise their knowledge. In themselves they do not contribute to learning

Table 1.3

Inspired by the field of cognitive psychology, O'Malley & Chamot (1990) have attempted to study learning strategies within the information-processing model of learning developed by Anderson (1983). Anderson distinguishes three stages of skill-learning: the *cognitive* stage, the *associative* stage and the *automatic* stage (see Table 1.4 below).

ANDERSON'S THREE STAGES OF SKILL LEARNING		
1. **Cognitive Stage**	↓	the learner is involved in conscious activity resulting in declarative knowledge (what we know about) and can be described verbally
2. **Associative Stage**		the learner strengthens connections among various components of the skill and constructs more efficient performance. Declarative knowledge is turned into procedural (what we know how to do)
3. **Automatic Stage**		performance becomes increasingly autonomous and subconscious

Table 1.4

Within this theory O'Malley and Chamot (1990) think that strategies take the form of production systems (i.e. "if...then" statements) to solve some learning problem. For example, "*If the goal is to initiate a conversation, THEN the subgoal is to say a memorized greeting formula*" (O'Malley and Chamot, ibid:74). These systems initially exist only in declarative knowledge and are conscious. Progressively, they are internalised until the learner is no longer conscious of using them.

Based on this information-processing model, O'Malley and Chamot (1990) distinguish three major categories of strategy: cognitive, metacognitive and social/affective.

Categories of Strategy	Definition
Cognitive	operate directly on incoming information, manipulating it in ways that enhance learning.[...] may be limited in application to the specific type of task in the learning activity
Metacognitive	involve thinking about the learning process, planning for learning, monitoring of comprehension or production while it is taking place, and self evaluating of learning after the learning activity is completed [...] applicable to a variety of learning tasks
Social / Affective	involve either interaction with another person or ideational control over affect[...] applicable to a wide variety of tasks

Table 1.5

Wenden (1991) provides a classification scheme of strategies devised as a basis for learner training. Her framework outlines only two major categories: cognitive and self-management (see Appendix A) and her focus is basically on the latter in order to develop learner autonomy.

The most comprehensive classification of learning strategies to date is the one provided by Oxford (1990). Based on virtually all the previous work, a general framework is drawn distinguishing two broad categories: direct and indirect strategies (see Table 1.6 below). Each is broken down into three subcategories and those are again divided into further levels.

OXFORD'S GENERAL FRAMEWORK (including definitions)

DIRECT: directly involved in the target language and require mental processing of the language:	Memory Strategies	• sometimes called mnemonics • enable learners to store and retrieve new information • reflect very simple principles which involve meaning • involve pairing different types of material
	Cognitive Strategies	• are essential in learning a new language and are a varied lot • enable learners to understand and produce new language by many different means • are unified by a common function: manipulation or transformation of the target language by the learner • the most popular strategies with learners
	Compensation Strategies	• allow learners to use the new language for either comprehension or production despite limitations in knowledge
INDIRECT: support and manage language learning without (in many instances) directly involving the target language	Metacognitive Strategies	• allow learners to control their own cognition • actions which go beyond purely cognitive devices and which provide a way for learners to co-ordinate their own learning process • essential for successful language learning
	Affective Strategies	• help to regulate emotions, attitudes, motivations and values
	Social Strategies	• help students learn through interaction with others

Table 1.6

It should be noted that Oxford's *memory* and *compensation* strategies have been included as cognitive strategies by most of the other researchers. Oxford mainly departs from other researchers in the treatment of compensation strategies in that she classifies them as a direct type of learning strategies, whereas others treat them as distinct from learning strategies (for example, Rubin 1987).

Oxford's framework has been criticised by Ellis (1994) pointing out that "the scheme is marred by a failure to make a clear distinction between strategies directed at learning the L2 and those directed at using them" (1994:539). O'Malley and Chamot (1990) also criticise this work, stating that "this extended listing is far removed from any underlying cognitive theory, fails to prioritise which strategies are most important for learning, and generates subcategories that appear to overlap" (O'Malley and Chamot, 1990:103). However, the organisation of specific strategies and the breadth of the taxonomy have contributed considerably to the attempt at classifying learning strategies. Furthermore, this scheme has been used in developing the Strategy Inventory for Language Learning (SILL), questionnaire designed to assess uses of learning strategies (see Section 6.3 for more details). At present this summative rating scale is the most frequently used strategy scale in the research of learning strategies (Oxford and Burry-Stock, 1995).

Apart from the disagreements and taking into account the above definitions and classifications of language learning strategies, we can conclude that there is agreement on the following points:

- Strategies include a cognitive element
- A social aspect is inherent
- Some metacognitive or language management is involved.

1.3 METHODS FOR INVESTIGATING LEARNING STRATEGIES

Early methods for investigating learning strategies were restricted to observing learners performing a variety of tasks most of the time in classroom settings. This has been criticised (O'Malley and Chamot, 1990; Oxford, 1990) since although useful for some language learning strategies, many take place mentally and are not open to external observation.

Other methods have been used by a large number of studies. Summarised from Oxford (1989, 1993) and Oxford & Burry-Stock (1995), the following are the most common techniques with their advantages and disadvantages in collecting data:

Data collection procedures	Advantages	Disadvantages
Formal observation	easy to use	cannot provide information on mental strategies
Interviews	provide personalised information that would not be available through observation	time consuming
Group Discussion	information on strategies used by a class as a whole	does not offer information about individual learner strategies
Diaries	provide detailed, rich data freedom of expression	impossible to compare between learners (open-ended nature of the diaries)
Dialogue Journals *(similar to diaries but include a response from the teacher)*	similar to diaries and include substantive response from the teacher	the same as diaries
Recollective narratives	provide a general picture of the whole learning process, i.e. information on other aspects of learning together with learning strategies.	lack of detail
Think-aloud protocols	offer the most detailed information	only on a 1:1 basis time-consuming only reflect strategies to the task at hand
Open-ended strategy survey	freedom of expression	do not lend themselves to statistical analysis
Structured strategy survey	do not leave much room for individual's creative response	useful for statistical treatment and group summaries

Table 1.7

To this list we should add Computer tracking. Researchers are now starting to use the potential of the computer to assess language strategy use. Cohen (1998) points out its advantages and disadvantages:

COMPUTER TRACKING	
Advantages	**Disadvantages**
• Track information with or without learners' awareness • Track unobtrusively strategies for forming hypotheses by keeping a log of the learners use of resource functions (dictionary, reference grammar, spell-checker, etc) during the reading or writing process. • Eliminates the problem of data distortion through human inaccuracy or unawareness.	• Unable to describe language learning and language use strategies which do not result from a resource function on the computer. • Its online nature may interfere with data collection. • Students' attitudes to the use of the computer may affect how often they use various resources. • Research might be limited by the lack of program availability.

Table 1.8

The success of a method in eliciting strategies and the variety of strategies that might emerge depend on the data collection procedure used. Because different types of data collection procedures may lead to different conclusions about the use of learning strategies some researchers have used multiple methods of data collection (O'Malley *et al.*, 1985; Van & Abraham, 1990).

Research on learning strategies involves some type of self-reporting. As Oxford (1993) indicates, much research on language learning strategies depends on learners' willingness and ability to describe their internal behaviour both cognitive and affective, either retrospectively or concurrently.

Using verbal reports has been extensively used in psychology and the social sciences (for details see Cohen, 1987). Studies collecting data from verbal reports can be divided between the ones that use concurrent introspection, data collected from the subjects verbalising thought processes while doing a task, and retrospection, data collected some time after the event has taken place. Methodologically, both data collection procedures have problems. That is why some studies combine both data collection techniques arguing that the two techniques in combination prove superior to either in isolation (Nunan 1992).

1.4 INDIVIDUAL DIFFERENCES and LEARNING STRATEGIES

How individual-difference variables influence L2 success has attracted considerable attention in second language research (Gardner & MacIntyre, 1992,1993).

Oxford (1989) synthesises existing research on many factors that influence the choice of learning strategy and later (Oxford, 1993) summarises the major findings of different studies as follows:

- *Motivation*: more motivated learners tend to use more strategies and the reason for studying the language (especially career orientation) is important.
- *Gender*: females report greater strategy use than males.
- *Cultural Background*: some Asian learners use different strategies from other cultural backgrounds.
- *Type of task*: the nature of the task helps determine the strategies learners naturally use to do the task.
- *Age and L2 stage*: learners of different ages and different levels of L2 learning use different strategies; more sophisticated strategies are used by older or more advanced learners.
- *Learning style*: learning styles often determine the choice of strategy but learners are sometimes able to use new strategies unrelated to their particular style.

Skehan (1989) has focused on language learning strategies as one of the most important individual difference factors in second language acquisition. Skehan argues that there could be systematic relationships between individual differences and a predisposition to use certain strategies. He talks about different variables such as motivation, aptitude, age and proficiency level which might influence strategy use.

One of the factors more often taken into account in studies is *proficiency* (for instance, Rost & Ross 1991). Skehan (1989) was the first researcher to suggest that learning strategies could be the result and not the cause of proficiency:

> "One can similarly argue that learner strategies do not determine proficiency, but are permitted by it. The use of learner strategies, that is, may not lead to higher accomplishment - instead one of the benefits of higher proficiency may be the capacity to use a wider range of strategies." (Skehan, ibid:97)

Undoubtedly, it is difficult to establish what leads to what: the contribution of strategies to proficiency or the effect of proficiency on the choice of strategies. More research is needed on the issue of causality between proficiency and strategy choice, which probably is bi-directional (Green and Oxford, 1995).

Assuming that strategy use both results from and leads to proficiency, MacIntyre (1994) points out that there are other learner and situational variables that also contribute to the effectiveness of strategy use: "Theoretically, the context in which strategies operate is multifaceted and must include both learner and situational variables to be complete. Such a model is more useful in explaining the manner in which strategies can affect proficiency" (ibid:189).

MacIntyre (1994) places language learning strategies in a larger system in which one should consider the following learner and situational factors: proficiency, aptitude, situational demands, attitudes, motivation, previous success, anxiety, self-confidence, sanctions against strategy use, task demands, goals, and criteria for success. He proposes an insightful *social psychological model* in which, influenced by all the cognitive and affective variables above, four conditions must be met before language learning strategies can be used:

1/ learners must be aware of an appropriate strategy
2/ learners must have a reason to use it
3/ learners should not have a reason *not* to use it
4/ strategy use should be reinforced by positive consequences

This model allows for strategy use to be context-dependent, awareness of a strategy may arise in one situation and not another, and indicates:

- that learners who are motivated to use a strategy may fail to do so because of interference from another variable,
- that future strategy use depends on the consequences of prior strategy use,
- that the judgement of success in meeting the communicative demand will be a key predictor of continued use of a given strategy.

MacIntyre concludes suggesting that this model may be used to make predictions about the interrelations of the variables and may have implications for the potential success of strategy

training. Failure of previous training programs may have been because they did not take into account the learners' personality and situational characteristics at a particular moment of their learning. Learners' readiness of strategy use is essential for any training program to be successful.

Ellis (1994) outlines a framework for investigating individual learner differences in three sets of interrelated factors consisting of:

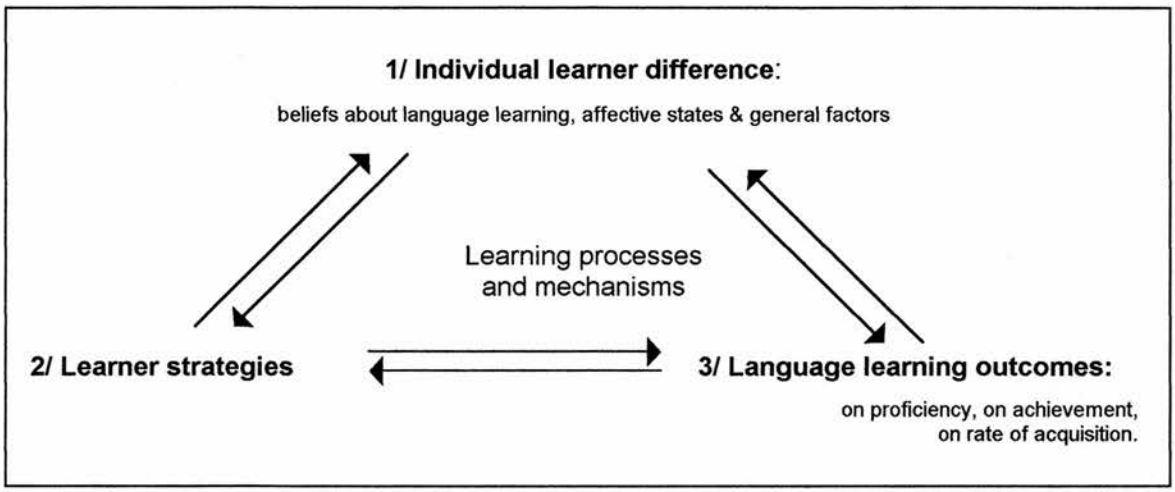


Figure 1.1

Ellis suggests that these three sets of variables are related in complex ways. The strategies which learners use will be influenced by individual differences and may also have an effect on them, e.g. successful use of a strategy can help to enhance motivation. At the same time, "strategy choice can affect learning outcomes, which in turn can have an influence on strategy use (for example, certain strategies may only become available when learners have reached a threshold of L2 proficiency)." (Ellis ibid:474)

Learning style, either for learning in general or for language learning in particular (Ellis, 1989; Ehrman and Oxford, 1989, 1990; Reid, 1995), is another fruitful area of investigation. In the same vein as learning strategies research, research of learning styles is both complicated and fragmented, with differing or overlapping terminology. Also the differences between learning strategies and learning styles have been often unclear. In any case there is growing interest in the area as we can see in the special issue of TESOL Journal, vol 6, no.1 (1996) devoted to learning styles and strategies.

Different dimensions of learning style have been identified, which come mainly from three traditions in psychology: 1/ Gestalt psychology, 2/ ego psychology and 3/ theories of Carl Jung.

In relation to language learning strategies, Ehrman and Oxford (1990) found significant relationships between strategy use and language learning styles as identified by Myers-Briggs personality types -a psychological-type model directly based on Jung's theories.

Oxford & Ehrman (1993) identify the following four dimensions of learning style as the most important for second language learning:

- Analytic-Global parameter, referred to as field independence and field dependence.
- Sensory preferences: visual, auditory, and hands-on.
- Intuitive/Random vs. Sensing/Sequential learning.
- Relative Orientation towards Closure or Openness, the degree to which a person needs to reach decisions or clarity.

Oxford and Ehrman (1993) review the research on these learning style dimensions concluding that "Language learners need to make the most of their style preferences by using familiar strategies related to their styles. However, learners must also extend themselves beyond their "stylistic comfort zone" to use learning strategies that might not initially feel right." (Oxford and Ehrman, 1993:198). The underlying idea stated here is that learners should be aware of their own style preferences and the advantages of their own types and then compensate for the less preferred strategies. This clearly has implications for learning strategy training since understanding style variables may help in identifying different types of training for different learners' styles.

The psychological-type model proposed by Ehrman and Oxford (1990) offers a conceptual framework for strategy training and research. Researchers and trainers should, however, be careful not to fall into the trap of trying to identify which style works best. Rather research should focus on how to help learners to develop their repertoire of effective approaches to learning (Kyriacou *et al.* 1996). Similarly, materials for strategic training (see Chapter 3, point 3.1) should concentrate on discovering learner beliefs and styles, rather than providing prescriptive remedies (McDonough 1995).

Research has begun to document the relation between learner styles and learning strategies. One example is the study by Rossi-Le (1995) whose focus was to investigate the role that perceptual learning style plays in language learning and to examine the relation between preferred *perceptual* learning style and learning strategy use. This relationship has clear "implication for creating instructional designs that are student-centered and that foster self-directed learning" (Rossi-Le 1995:118). Her study was carried out with 147 ESL learners from different cultural and language backgrounds and reveals that variation in strategic approaches to language learning is partly due to perceptual learning style preferences and partly to a complex system of cultural specific variables constantly at work. She concludes that perceptual style is also an important factor to be considered.

Another issue regarding learning strategies and styles is their relation to the use of computers Adapting from O'Malley and Chamot's classification of learning strategies, Bickel and Truscello (1996) draw up an interesting list of learning strategies using computers observing learners at work in the language lab. They simply introduce the issue and point out that research is needed in this area to investigate whether the learning strategies that learners use on the computer are different from the ones used in other contexts, such as in class.

Another of the individual difference factors mostly investigated in the last decade is the cultural effect on language learning strategy use. Oxford (1996) presents the first collection of studies on different cultural and cross-cultural studies on language learning strategies use, assessment and training.

It is now generally recognised that many factors exist to explain individual differences in strategy choices. The challenge for research is to disentangle the complex interplay among the different influential factors.

1.5 LEARNING STRATEGIES AND THE RECEPTIVE SKILLS

In the literature there is the general assumption that reading and listening comprehension are very similar and so can be treated together for some purposes (McDonough, 1995). This is obviously not considering the essential differences: first, "the auditory recognition skills involved in listening decoding are clearly different from the visual recognition skills needed for reading" (Rost, 1990:10) and second, listening involves attention to a stream of speech which is not under the timing control of the listener.

In both skills we must identify 'idea units' and the reader/listener has a crucial part to play in the process of activating various types of knowledge (Anderson and Lynch, 1988).

- background knowledge
- procedural knowledge
- knowledge of the situation/and of co-text
- knowledge of the language system

The use of these types of knowledge seems to be similar in both skills (reading/listening).

Although the media are different (visual vs. aural), some strategies a reader/listener uses in order to succeed in understanding the content of what they see or hear are similar in the receptive skills, such as:

- predictive skills: anticipating
- using one's knowledge of the outside world
- extracting specific information
- identifying relevant points and rejecting irrelevant information
- retrieving and retaining relevant points (note taking, summarising)
- getting a general picture
- inferring the meaning of words
- recognising discourse patterns

As Rost (1990:8) points out "the cognitive strategies that underlie effective reading will have much in common with those that underlie effective listening". It has been assumed that human

beings seem to have a general processing capacity which enables them to deal with written and spoken input using comparable cognitive strategies.

In that sense, it should be noted that most of the research to date on strategies related to receptive skills is about reading comprehension. Caution, however, is required in generalising results to listening comprehension. The nature of the relationship between listening and reading has yet to be established empirically (Lund, 1991). Another common assumption is that "developing effective listening skills could lead not only to improved listening but also to better reading" (Anderson and Lynch, 1988) This question of transfer of skills or strategies in training also needs empirical demonstration.

1.5.1 STRATEGIES IN L2 READING

Traditionally there have been two trends in reading research, one which focuses on the use of language-specific knowledge (bottom-up processes) and the other emphasises the use of background knowledge, referred to as schema-theory (Carrell, 1984). There is also a more eclectic trend which considers both kinds of processing, bottom-up and top-down, essential for being a successful reader (Eskey, 1988).

It should be noted that most research on L2 reading is influenced by the L1 reading research, and some studies have tried to compare strategy use when reading in L1 and in L2. In the following review, we will focus on L2 strategy use.

In line with earlier research on learning strategies, Hosenfeld (1984) attempts to identify what good readers do that poor readers do not in order to train poor readers in some of the strategies characteristic of good readers. This research uses think-aloud protocols in a case-study format.

Most research on reading strategies has been centred on comparing good and poor readers, and some solely on good readers. In contrast, Block (1986) attempted to explore approaches to reading by non-proficient readers. Block isolated a number of reading strategies used by these readers into two broad categories: general and local strategies.

BLOCK'S STRATEGY TYPES

General strategies: include comprehension-gathering and comprehension-monitoring strategies	
1. Anticipate content	6.Use general knowledge and associations
2. Recognize text structure	7 Comment on behaviour or process
3. Integrate information	8. Monitor comprehension
4. Question information in the text	9 Correct behaviour
5. Interpret the text	10 React to the text
Local strategies: deal with attempts to understand specific linguistic units.	
11 Paraphrase	14 Question meaning of a word
12 Reread	15 Solve vocabulary problem
13 Question meaning of a clause/sentence	

Table 1.9

Block recognises two modes of response to reading:

- extensive: learner remains closely tied to the text
- reflexive: learners relate to the text personally and affectively

Related to these modes she outlines two patterns of strategy use:

Integrators:	Non-integrators:
responded in extensive mode	responded in reflexive mode
frequently aware of text structure	reacted less to text structure
monitored their understanding	made fewer attempts to connect
highlighted the main theme in their retellings	reported more details and fewer main ideas

Table 1.10

Block noticed that some learners respond in extensive mode all the time whereas some are mainly reflexive and some mixed.

Results from both Hosenfeld's and Block's work are somehow limited due to their small number of subjects involved and the text being read. Their studies, however, are the first attempts to use techniques to get relevant information on the reading process immediately after the activity.

Other studies have used other techniques to research reading strategies. Barnett (1988) investigated the issue of perceived use of reading strategies using a questionnaire. The results reflected a significant relation between reader perception of strategy use and comprehension. Those readers reporting effective strategy use comprehended more than those who did not report using such strategies. Nevertheless, it should be noted that the questionnaire employed imposed limitations on the scope of the data collected.

Carrell (1989) also used a questionnaire asking readers about perceptions of their strategies in silent reading of the L1 and L2, and the relation between these strategies and their reading ability. Carrell was particularly interested in readers' metacognitive strategies and the relationships among perception of strategies, strategy use and reading comprehension. The questions concerned four aspects of reading strategies:

- Confidence: related to reader's perceived ability to read in the language
- Repair: related to repair strategies a reader uses when comprehension fails
- Effective: related to reading strategies the reader feels make the reading effective
- Difficulty: related to aspects of reading which make the reading difficult.

Carrell found differences between strategy perceptions associated with L1 and L2 good readers. Regarding L2 reading, her data reveals a consistent difference according to language-proficiency level and that more effective learners used a more top-down approach. Her results must be interpreted as suggestive rather than definitive due to the unbalanced proficiency profiles of the groups.

The last two studies have perceptions of strategy as the underlying subject for research. The premise is that "if a reader is aware of what is needed to perform effectively, then it is possible to take steps to meet the demands of a reading situation more effectively" (Carrell 1989:122)

The identification of different reading strategies has been a central issue in reading strategy research. Following the classification outlined by Serig (1987, cit. McDonough, 1995:56), McDonough (1995) summarises the reading strategies identified in different studies as follows:

> "1. *Technical aids*
> skimming / scanning / marking the text / marking a paragraph summary in the margin /using glossary / recognizing cognates / examining illustrations / using context to define a word
>
> *Clarification and Simplification*
> syntactic simplification / producing synonyms and circumlocutions / using paraphrase of rhetorical function / paraphrase / identifying grammatical category of words / interpreting the text /using inference / addition of information
>
> *Coherence detection*
> identifying the macroframe / keeping the meaning of the passage in mind / using information about the story / using general knowledge and associations / using knowledge of the world / using background knowledge / identifying key information / anticipating content / hypothesising / recognizing text structure / integrating information
>
> *Monitoring*
> consciously changing the plan / holding / deserting a hopeless utterance / varying the reading rate / rereading / identifying misunderstanding / stating failure to understand a word or a clause / correcting mistakes / skipping in a controlled fashion / self-directed dialogue / evaluating guesses / following through with a solution to a problem / questioning information in the text / commenting on behaviour / monitoring comprehension / reacting to text /questioning meaning of clause, sentence or word". (ibid.: 57-58)

From this extensive list we can conclude that similar strategies identified in different studies are difficult to equate. The different studies from which this list is drawn up have used different research methods in different contexts thus identifying different strategies. As happens with learning strategies research, some agreement is needed in order to be able to make comparisons among studies and come up with more conclusive results.

Some other research has focused on a particular reading strategy, e.g. inferring the meaning of unknown words. Arden-Close (1993) attempts to compare the strategies used when inferring meanings of unknown words by three non-native readers, a good, an average and a poor reader. He concludes that the good reader uses a wider range of strategies.

Research on reading and strategy training is relatively scarce. Carrell, Pharis and Liberto (1989) carried out a study of metacognitive strategy training for reading in ESL. Results mainly show that metacognitive strategy training is effective in enhancing L2 reading and that its effectiveness is related to differences in the learning styles of the learners. From a different perspective, Rusciolelli (1995) studied learners' preference of reading strategies after providing strategy instruction on the main basic reading strategies such as skimming, scanning and contextual guessing of vocabulary. No individual strategy was identified as most useful. However, her data revealed that instruction in skimming and word inferring proved most useful to learners. These results are in line with research by Anderson (1994) who indicates that there

is no single set of processing strategies that contribute to success. He claims that "strategic reading is not only a matter of knowing what strategy to use, but also the reader must know how to use a strategy successfully and orchestrate its use with other strategies" (ibid:186).

With regard to reading strategy using a computer as a medium, this is still a field open to research. One example found in the limited literature is a study by Trollope (1995) who attempts to identify differences in strategy use when learners try to complete a cloze task on computer and on paper. The results of this study showed that strategy use was very similar between the two groups.

1.5.2 STRATEGIES IN L2 LISTENING

Research on listening strategies thus far has not led to many firm conclusions because the methods used have been quite subjective (Rubin, 1994) and thus findings need to be validated. The main factor for this could be that the process of listening is probably even more difficult to research than that of reading. Yet, studies on listening strategies are becoming of greater interest in L2 research. An example of that is the research study by Goh (1997,1998).

Murphy (1985) found that higher proficiency listeners inferred, self-described, personalised and anticipated more frequently than less proficient listeners. Murphy analysed cognitive and metacognitive strategies together. He identified that more proficient listeners tended to have a more open and flexible use of strategies whereas less proficient listeners tended to depend more on the text. It must be noted that his definition of more proficient listener was determined by the frequency of strategy use thus pre-empting somehow the results.

O'Malley, Chamot & Küpper (1989) found significant differences between effective and ineffective listeners. They identified three particular groups of strategies that effective listeners used more:

- self-monitoring: checking their comprehension as it was taking place
- elaboration: relating new information to prior knowledge
- inferencing: using information in text to guess meaning of words and phrases or to complete missing ideas.

Again, their definition of the effective listener was subjective. It is clear that further research studies should use an independent measure of efficiency.

Rost and Ross (1991) in a two-phase study attempted to see how learners used strategies in interaction. Their initial interest concerned the degree to which patterns in listener clarification questions were different across varied proficiency levels. Results pointed to the notion that the use of certain strategies correlates with proficiency. They also suggest that strategies used by more proficient listeners can be taught to learners who might otherwise not use them. They also claim that specific listening strategies for specific tasks can be taught to learners of all proficiency levels and stress the importance of research on how to help learners advance in their comprehension ability.

Research on learners' perception of strategy use in listening comprehension is relatively non-existent. Vogely (1995) studied how learners perceived the use of strategies while performing an authentic listening comprehension task and the relationship between strategy use and listening ability. Her study concentrated upon a research question on repair strategies. Vogely found that listeners perceived themselves as using a bottom-up approach in their repair strategies but a top-down approach in their perception of effectiveness and confidence. In this study she identified a gap between "knowing what" and "knowing how". That is to say, despite learners having the required knowledge and skills, they did not use them as effectively as they should. She concludes that strategy training would help to close the gap.

Most recently Goh (1997 and 1998) investigated the listening comprehension strategies of 40 ESL learners in a diary study. Goh (1997) shows that learners had clear ideas on three aspects of listening: their role as listeners, the demands and procedures of second language listening and finally strategies for listening. Moreover, 'the study showed that high-ability listeners used more strategies and tactics than the low-ability ones. They were also able to vary their application of tactics within each strategy. Both groups used more cognitive strategies and tactics than metacognitive ones, but the low-ability learners were particularly poor at it.' (Goh 1998:124) She argues for increasing learners' metacognitive awareness in order to improve their success in listening.

These types of studies start to unravel and describe which language learning strategies are specifically used by learners in listening tasks and to argue for appropriate methods of research that could reveal that information.

1.6 IMPLICATIONS FOR THE STUDY

Unfortunately, language learning strategy research is still a battlefield of contending theories. This fact makes research into learning strategies conceptually difficult. Specifically, agreement on the definition of *learning strategy* is a prerequisite for establishing what exactly researchers are observing. Most of the definitions offered had too broad a perspective, which produced sets of research with different results. The advantage of a broad definition is that it allows the researcher to look into the issue from a more holistic viewpoint. As we have seen, the issue of language learning strategies is a complex one due to their interconnectivity within themselves and with multiple external variables. The disadvantage is that it does not circumscribe the concept in such a way as to see those influential variables as different aspects of the phenomenon under study. The concept of language learning strategy should only encompass the elements directly related to the phenomenon.

In an attempt to limit the concept, MacIntyre (1994) restricts learning strategies to those behaviours that are intentional and freely chosen. In that sense, the present study adopts the same stance towards the nature of language learning strategies. This allows for focusing on those actions that facilitate language learning and that are deliberately chosen by the learner. We should, however, acknowledge the fact that in some tasks learners use strategies operating above the threshold of conscious awareness (Little, 1996). In practical terms, these two characteristics are the key elements for observing the phenomenon. The emphasis in the present study is on the strategies that the learner is aware of, so that strategies could be identified by methods such as retrospective interview and computer tracking of learner moves.

From the literature, it seems clear that language learning strategies are used in combination to provide greater strategic power, but there is still not enough knowledge of the interrelationships between them. In this study, attention will be given to the interrelationships of strategies. However, the complexity of these can not be explored from a general perspective. This could only be achieved if the study concentrated on a particular strategy and observed its multiple relationships. Accordingly, this study will look at one general strategy, i.e. resourcing, or more specifically, the use of help facilities, and its relations to others. We cannot understand the whole picture if we do not understand its parts.

A study of this kind will focus on one part with the hope of a better understanding of the nature of the complex system in which learner strategies operate.

The use of help facilities in the CALL program presented for this study is partly related to what Oxford (1990) describes as compensation strategies, since the main aim for using those is to overcome some knowledge limitations. Hence, we can look into the interrelations among these particular strategies.

Anderson (1994) and Vogely (1995) stress another key issue: being strategic is not simply a matter of knowing *what* to use but also *how* to use it successfully. This requires that a CALL program which tries to promote language learning strategies should incorporate some sort of information on the *how*. A consequence of this fact is the implementation of an option in the program design by which the learner can have access to this type of information. Thus the use of help facilities here is understood in a much broader sense, i.e. it is related to either direct or indirect strategies, following Oxford's terminology. For instance, the use of the help facility such as the Experts module which introduces the *how* information is related to metacognitive strategies which Oxford classifies as indirect. (for more detailed explanation refer to Chapter 4, 4.4) In the present study, we try to provide insights into learners' cognitive and metacognitive strategies in relation to the use of the help facilities provided. Therefore, the focus of the design of the program is also intended to assist learners in the use of those language learning strategies.

Ellis (1994) and MacIntyre (1994)seem to agree that the learner should be ready to use a certain strategy. This readiness will depend on different factors such as the level of L2 knowledge or previous experience with the use of the strategy. These factors interact in different ways with learning strategies and should be taken into account in the present study in order to give a more complete account of learners' strategy use. All these multiple factors are related to individual differences, hence it is unlikely to be practical to control them all in a research study. For practical reasons, we concentrate on a specific factor which is of particular interest, i.e. learners' linguistic level.

Should we follow MacIntyre's model (1994), awareness of strategy is seen as context-dependent since the demand for its use may arise in one situation and not in another. Nevertheless, similar situations may increase the possibilities for transfer of strategy use from one situation to another. This has clear implications for the design of the CALL

program in that we are presenting the learner with different situations (listening to the radio, watching TV and reading the newspaper), which imply different demands on the learners, but are sufficiently similar that it would seem reasonable to speculate that transfer of strategies might occur. The main purpose of the design is to create an environment where the learners may make use of some strategies in order, then, to transfer those to other situations. Furthermore, the hypothesis that human beings seem to have a general processing capacity allows for presenting practice of both language skills in only one environment. One-way listening and the skill of reading have things in common such as the individualised nature of such actions.

A study of language strategy learning, and in particular the use of help facilities in a CALL environment, is motivated by the fact that this issue is of crucial importance for developing learners' awareness of themselves as language learners and of how to operate successfully in a foreign language. Most previous studies have concentrated on overall strategy use and identification of strategy revealing a useful but too general picture of the phenomenon. The present study is an attempt to investigate strategy use by paying more attention to differences in the use of individual strategies. In that way, the study may reveal more complex patterns of strategy use than the ones reported in previous studies. We should acknowledge, therefore, that the complexity of the issue will determine the level of complexity of the research methods used in the study.

Chapter 2
SECOND LANGUAGE PEDAGOGY

The development of the so called "communicative approach" has been much debated and has permeated classroom practice, syllabus and material design, teacher training and educational systems in most parts of the world since the '70s.

The introduction of communicative methodology spread gradually in different countries and much critical attention has been devoted to the point that the debate is still current. Basically, there have been different ways of understanding the concept of *communicative* and this has drawn on several theoretical areas of debate since its origins and has created a rich ground for discussion.

McDonough and Shaw (1993) review the issue and outline seven implications of the communicative approach for teaching:

> "1. 'Communicative' implies 'semantic', a concern with the meaning potential of language.
> 2. There is a complex relation between language form and language function.
> 3. Form and function operate as part of a wider network of factors.
> 4. Appropriacy of language use has to be considered alongside accuracy. This has implications for attitude to error.
> 5. 'Communicative' is relevant to all four language skills.
> 6. The concept of communication takes us beyond the level of the sentence.
> 7. 'Communicative' can refer both to the properties of language and to behaviour." (ibid:26)

There seem to be reasons, in fact, to consider that a communicative approach allows for a richer learning environment. There are, however, many questions that still need to be resolved. Issues such as appropriacy of using the communicative approach at all levels and contexts or the issue of authenticity (for examples, see Yuk-chun Lee, 1995; Kramsch and Sullivan, 1996; Widdowson, 1996; van Lier, 1996) are some of the controversial pedagogical notions still under debate.

One of the most important aspects within the communicative approach is the shift of focus on to a more *learner-centred approach* of language pedagogy which, in turn, has drawn on an interest for learner autonomy and self-instruction (Dickinson 1992, Little 1991).

Nunan (1988) describes a rationale for a learner-centred curriculum development stressing that the decisions about what to learn, how to learn it and when to learn it should be made with reference to the learner. This is not to say that a learner-centred curriculum assumes that learners can make those informed choices when they come to a language classroom but rather, that such a program should carry learners "toward the ability to make critical pedagogical decisions by systematically training them in the skills they need to make such decisions" (Nunan 1995:134). This approach is the bedrock upon which the notions of learner autonomy, individualisation and self-directed learning have been established. (see Gremmo and Riley, 1995, for a historical review of these issues)

One of the issues related to learner-centredness that researchers have explored is the mismatches that may occur between learning and teaching (Nunan, 1995; Felder and Henriques, 1995) For instance, mismatches of learning styles of learners and the teaching styles of the teacher can raise negative consequences, such as frustration, poor attendance or low grades. The generally recognised aim is to provide a balance of varied instructional methods that can accommodate the learning styles represented in the class.

With the consolidation of communicative approaches, much of the emphasis is on the *process* of learning. Breen (1987:159) states that "one of the major sources of impetus for the recent interest in alternative methodologies has been an intensified theoretical and research focus upon the language learning process and, in particular, the contributions of the learner to that process". The focus is not on the end result of the learning process but on the development of skilled language use. In recent years, process-orientated approaches, e.g. task-based teaching, have been present in classroom practice, materials and syllabus design. The underlying idea is to help learners develop techniques, skills or strategies that can later be transferred to other tasks. These strategies are used as the basis for specific tasks and exercises.

2.1 TEACHING LEARNING STRATEGIES

The belief that learning strategies can be taught is the central idea for the implementation of strategy training in L2 teaching. To this end, resource books for teachers (Grenfell *a*nd Harris, 1999) and textbooks for learners have started to appear. In addition, learner training programs have been designed and some research has been conducted to assess their potential effectiveness.

As mentioned above (see introduction of Chapter 1) research on strategy training has produced little evidence of the successful effect on language learning. There have been numerous studies (for instance, Wenden, 1987; O'Malley and Chamot, 1990) which have taken an explicitly interventionist approach by introducing a specific formal training program. This type of research has been problematic and criticised (Rees-Miller, 1993; McDonough, 1995). Reasons for the controversial results of the usefulness of learner training are:

- too short a period for strategy training; no longitudinal studies to date have been carried out to observe strategy use over time
- an overemphasis on the more purely intellectual aspects of language learning
- a lack of attention to affective and social strategies
- restrictive focus on strategies for particular skill areas or on particular strategies
- a lack of integration of the training into normal class work
- inadequate pre-training assessment of learners' current strategy use, learning styles and needs

Apart from these methodological problems there are fundamental questions to be resolved before correlating strategy use or awareness of strategy with gains in language learning. Thus more research is obviously needed in this area. Besides, before this could go ahead some assumptions about what constitutes the characteristics of strategies should be agreed. Rees-Miller (1993) suggests that learning strategies in order to be teachable and their results replicable must be defined in terms of *observable, specific, universal behaviours*. The problem lies, as pointed out in section 1.2 in Chapter 1, in that what most researchers consider as exemplary of successful learning strategies is not universal and is bound by

individual variables. One clear example is the cross-cultural studies collected by Oxford (1996) where several instructional programmes of language learning strategies are described.

Similarly, a fundamental misconception is to assume that all strategies are amenable to training. It is essential to agree on which strategies are more likely to cause more efficient learning. Most of the material and approaches for the development of strategic knowledge are designed to open up learners' range of strategies, and the fact that strategy use can vary greatly between individuals poses the problem of what type of instruction is best for learner training. There is a danger of constraining learners instead of expanding their strategic knowledge. It is fundamental that teachers are cautious when applying language learning training in their classroom and should take the appropriate decisions for their learners. McDonough (1995:97) suggests seven kinds of decision:

> "1. Discover the student's strategies first or present the new strategies first.
> 2. Teach strategies and language together or separately
> 3. Be explicit about the purpose of strategies or not
> 4. Develop a course of training or a one-off lesson
> 5. Chose the appropriate teaching techniques
> 6. Choose a method of evaluation:
> improvement on learning task
> maintenance of strategy use after training
> transfer of strategy to new situations
> 7. For an investigation of the strategy teaching, design an appropriate form of study:
> random assignment of students to tasks
> control group and control activities
> product measures and affective measures, etc."

The main consequence of the problems mentioned is that learner training materials have been designed following a variety of approaches. From various programmes and materials Cohen (1998) identifies three main frameworks: "They have been designed to raise student awareness as to the purpose and rationale of strategy use, to give student opportunities to practise strategies that they are being taught, and to help them understand how to use the strategies in new learning contexts ."

Incorporating strategic teaching has started to be developed in a variety of ways. Cohen (1998) describes the following: general study-skills courses, awareness training through lectures and workshops, peer tutoring, strategies training inserted into textbooks, video-taped mini courses and strategies-based instruction in which strategy training is fully integrated into the language curriculum. To exemplify learner training implementation, 3 programs or sets of materials are now outlined:

Developed out of research experience, O'Malley and Chamot (1990) described a system called CALLA (Cognitive Academic Language Learning Approach) designed to work through content-based ESL teaching. The theoretical framework of CALLA is based on the three-way classification described in point 1.2 in Chapter 1. Lessons in CALLA are divided into five phases:

1. Preparation: develops learner awareness of different strategies
2. Presentation: develops learner knowledge about strategies
3. Practice: develops learner skills in using strategies for academic learning
4. Evaluation: develops learner ability to evaluate their own strategy use
5. Expansion: develops transfer of strategies to new tasks

Their approach can be described as a problem-solving process where learners become aware of their strategy use, have the chance to practise and see the rationale behind them.

Another set of materials worth mentioning is that of Ellis & Sinclair (1989). They developed a language learner training course which was the first systematic step in Europe to provide teachers and learners with materials that focus on learning styles, self-assessment of needs and use of different strategies to improve each language skill. It is envisaged for complementary use either for preparation to the language lesson or for use within the lesson. The underlying objective for these materials is to raise learners awareness of the language learning process and, consequently, to help learners to assume more responsibility for their own learning.

Most learner training materials and approaches have focused mainly on strategies for self-directed learning, i.e. metacognitive strategies or on cognitive strategies (Wenden, 1995). Little attention has been paid to knowledge about cognition, which she describes as "task knowledge", i.e. knowledge about the nature and purpose of the task. Wenden tries to explore the relationship between task knowledge and autonomous learning, advocating that learner training should "give equal recognition to both the strategies of learning and the knowledge that is essential to their operation" (ibid:192). Without the latter learners may not be able to become autonomous.

An interesting example where the cognition element is implemented is the computer assisted multimedia program called *Language Learning Strategies Program,* which is probably the first of its kind to introduce language learner training via computer. Eight hours of material on videodisc provide instruction on language skills (listening, reading and speaking), on language segments (grammar, vocabulary), memory and sociolinguistic aspects of communication. (Rubin, 1996). This program provides learners with opportunities to experiment with a wide range of strategies which learners can use later in the classroom, for self-study or in the real world.

2.2 SELF-DIRECTED LEARNING

The main concepts of self-directed learning were largely developed in the '80s (Holec, 1981; Dickinson, 1987) and in recent years there has been an increasing interest in this field (Little 1991; Dickinson, 1992; for a more detailed review see Hill, 1994).

The terms of individualisation, autonomy, learner independence, self-access, self-instruction and self-direction are frequently used in educational studies in recent years. All these terms are by no means synonymous and by way of clarification here are the most common definitions of these concepts:

> "Self-instruction: this is a neutral term referring generally to situations in which learners are working without the direct control of the teacher.
>
> Self-direction: this term describes a particular attitude to the learning task, where the learner accepts responsibility for all the decisions concerned with his learning but does not necessarily undertake the implementation of these decisions.
>
> Self-access learning: this is self-instruction using (self-access) materials. The term is neutral as to how self-directed or other-directed the learners are.
>
> Individualised instruction: once again this term is neutral as to who takes responsibility for the learning. Chaix and O'Neils (1978) define it as: 'a learning process which (as regards goals, content, methodology and pacing) is adapted to a particular individual, taking this individual's characteristics into consideration. "
>
> (Dickinson 1987:11)

These different concepts interrelate in different ways. For instance, self-directed learning entails individualisation but not the reverse. A teacher can run an individualised program in a teacher-centred way thus not promoting self-direction. The issue here is one between *freedom* and *control*, between *self-directed* learning and *external* (teacher) *directed* learning. McDonough and Shaw (1993) suggest that most individualised programmes occur between two polarised extremes: the totally directed mode and the totally self-directed mode. Similarly, "a self-instruction context for learning does not automatically equate with learner autonomy but autonomy may arise and develop within the learner as a response to the specific demands of a self-instruction context" (White, 1995:209).

Autonomy has been defined as "the situation in which the learner is totally responsible for all the decisions concerned with his learning and the implementation of those decisions" (Dickinson, 1987:11). In that sense, the concepts of independence and autonomy are sometimes misinterpreted. Working alone does not obviously entail autonomy or self-instruction. Autonomy in language learning requires both the ability and opportunity to make meaningful choices for taking control of one's learning. As Little (1991:4) describes it:

> "Essentially, autonomy is a *capacity* – for detachment, critical reflection, decision-making, and independent action. It presupposes, but also entails, that the learner will develop a particular kind of psychological relation to the process and content of his learning. The capacity for autonomy will be displayed both in the way the learner learns and in the way he or she transfers what has been learned to a wider context."

Thus in autonomous learning the learner should develop this capacity for critical reflection of his/her learning process, and evaluate it and act making adjustments accordingly. In a nutshell, the learner should develop a conscious control over his/her learning process.

Nunan (1995) argues that autonomy is not an all-or-nothing concept but it will be largely determined by contextual variables such as: age and proficiency of the learners, previous and current educational experiences, the attitude and training of the teacher, and the goal of the language programme in which the learning takes place.

Most researchers agree that autonomy will only be achieved by some learner support. Sheerin (1991), in her review of self-access learning, points out possible dangers of leaving the learner alone with masses of information. Independence depends not only on learners being prepared for that but also on developing learners' self-direction by providing some

guidance. In an enlightening discussion of these issues, Barnett (1993) also claims that "being surrounded with resources is not the same as being resourceful" (ibid:296).

Computer technology developments, such as CD-ROM, have put at our disposal a wide range of tools and materials that could provide a flexible environment for self-direction capable of catering for individual needs. Barnett (1993), however, also states that most computer programs, though sophisticated, may "enmesh the learner more expertly in a prescribed learning pattern" (ibid:296). In this way self-direction cannot be gained since it becomes constrained by the pedagogical decisions that the designer has made. The learner should assume a set of responsibilities to avoid dependence on an imposed system. Consequently, he advocates an active role for the teacher in guiding learners to take the necessary responsibilities for the achievement of their own autonomy.

One of the fundamental issues of self-directed learning is the problem of self-assessment. Giving opportunities for learners to assess themselves is one of the great challenges that the production of self-directed material has to face. It is particularly difficult to find ways that learners find acceptable and, most importantly, meaningful. CALL programs are potential providers of self-assessment opportunities using, for instance, different options of feedback. Self-assessment suits some aspects of language, such as discrete language items, more than others. This is one of the reasons why most CALL programs consist of simply answer keys to gap-filling and multiple choice exercises. This sort of self-assessment has been criticised because it does not provide everything that the learners need (Gardner, 1996). When dealing with more complex issues of language learning such as comprehension, a more complex and meaningful way of providing feedback is a necessary requirement for self-assessment.

Dickinson (1987) also distinguishes between self-assessment and self-monitoring which includes record keeping by different means. This procedure increases learners' control of their learning and provides valuable data for their teacher and/or researcher. Keeping records of learners' assessment outcomes can be accurately carried out by the computer.

Strategies that learners use in a self-instruction context and the degree of autonomy learners exercise to develop language skills have, to date, received little attention. White (1995) tries to investigate this issue in a comparative study of the strategies of distance and classroom foreign language learners. Recognising the limitations of her research, she concludes that the frequent use of a wide range of metacognitive strategies is what enables learners in a

self-instruction environment (in this study, distance learning) to develop a degree of autonomy higher than the one required in a classroom setting. The study reveals that learners apply their self-knowledge as language learners in order to overcome the potentially negative effects of an isolated learning context. This individual self-knowledge provides the basis for the use of self-management strategies which, as White claims, are central to the development of an autonomous approach to language learning.

2.3 TEACHING RECEPTIVE SKILLS

The major contribution to our knowledge of receptive skills, with many implications for teaching, is provided by schema theory. Schema theory posits that the way in which language users process a text is dependent not only on the information present in the text but also on the relevant mental structures which they bring with them in the processing of the text. In foreign language instruction, the problem that teachers face when teaching receptive skills is not just because of difficulties in the language but also because of different schemata. The one assumed by the author and the one applied by learners do not always match up. Thus, one of the main objectives of the most recent trend in teaching receptive skills is to help learners in the prior activation of schemata to enhance their comprehension of texts.

The traditional standard procedure for teaching receptive skills involved three steps:

1. the learners read a text or listened to a recorded text
2. they answered some questions on the text
3. they received feedback on whether they understood the text correctly

In addition, early materials meant for listening and reading practice were in fact mostly used for presenting grammar or vocabulary and not for listening or reading comprehension as such.

The emphasis on "process" rather than "product" has changed the methodology of teaching receptive skills in recent years. The most significant change is perhaps the shift away from

testing learners' comprehension to teaching, i.e. helping them to develop different reading/listening skills.

Within the communicative approach, the traditional idea of considering receptive skills as "passive" has been totally abandoned since much active work is involved in comprehending a text. When interacting with a text we are involved in multiple activities such as guessing, interpreting, checking and so on. Similarly, communicative practitioners agree that there are two general processes which interact to aid comprehension: top-down and bottom-up.

At the level of material production and teaching practice, the main objective is to help learners function successfully in real life situations. The issue of authenticity is paramount for the development of learners' receptive skills. Thus most teachers' reference books (Nunan, 1991; McDonough and Shaw, 1993; Ur,1996) stress the importance of exploring the *reasons* why we read or listen as well as the *type of the texts* and *situations* which we typically encounter in our daily life. The different purposes involved in reading/listening will also determine the degree of attention given and the use of an appropriate comprehension strategy. In trying to convey a sense of authenticity in the classroom, teachers try to integrate the reading/listening task into a meaningful context. Most exercises require the learner to extract meaning and then use the information to perform another task. This is a reflection of what we do in the L1 in real life.

2.3.1 TEACHING L2 READING

In methodology books on reading (Grellet, 1981; Nuttall, 1982; Wallace, 1992) most commonly used to date, at least in ELT/EFL settings, the psycholinguistic idea that reading is a sort of "guessing game" (Goodman, 1967) and the emphasis on the reading process are recurring concepts.

Approaches to teaching L2 reading have been dominated by two models: the one that favours a bottom-up approach and the one of a top-down view of the reading process. The former is associated with traditional methods of teaching whereas the latter has been favoured by the communicative approaches. The debate between the two models has a long history and is still a current issue. From this debate some researchers have tried to provide a more balanced model, the so-called interactivist model. Within this model of reading, the

meaning of a text is reconstructed through a constant interaction between the information gathered through bottom-up decoding and top-down analysis, both of which rely on previous knowledge and information-processing skills (Klapper, 1992). Nonetheless, within the communicative approaches the teaching profession thus far has given more priority to the top-down view. That is the reason why some researchers point out the overemphasis of one model at the expense of others. For instance, Paran (1996) claims, based on research findings, that good readers do not rely on hypothesis formation and prediction as much as is commonly thought and suggest ways of revising a bottom-up view of the reading process in which automatic word recognition is seen as an essential skill for developing reading comprehension.

There has always been a mismatch between theory and practice in different areas of language pedagogy. However, Anderson (1994) presents an interesting pedagogical framework, called ACTIVE, for integrating principles of theory into practice. Based on different research, he suggests six interrelated components as follows:

"A: Activate prior knowledge
C: Cultivate vocabulary
T: Teach for comprehension
I: Increase reading rate
V: Verify reading strategies
E: Evaluate progress" (ibid:177)

He clarifies that these elements overlap with one another emphasising the interactive nature of reading.

In the communicative classroom and for practical reasons, reading is broken down into a set of micro-skills, which can be practised in isolation or in any combination together. Activities (examples can be found in Grellet, 1981) are designed around these micro-skills which closely depend on a range of strategies such as scanning, skimming, inferencing or predicting (Nuttall 1982, 1996). Generally the way of planning these activities has been structured into three main steps: pre-reading, while-reading and post-reading activities; each step serving a different purpose for the reading comprehension.

Pre-reading activities are usually designed to:

- activate relevant background and form schemata
- encourage learners to predict content
- give necessary cultural information
- raise learner interest

- provide learners with a purpose for reading the text

While-reading activities are, for instance, designed to:

- acquire reading strategies
- improve micro-skills
- improve command of the linguistic features of the L2

The purpose of Post-reading activities is usually to:

- verify the degree of understanding
- develop learners' creativity and critical thought
- help them transfer strategies to other texts

This pedagogical approach is in line with the accepted theories of reading as an interactive process and is mostly followed by the recent literature on teaching L2 reading (Bamford and Day, 1998). The main objective is that by activating background knowledge, and giving practice in reading strategies, teachers can help L2 learners to interact with a text as L1 readers do.

A common distinction made when teaching reading is between *intensive* and *extensive* reading. Intensive reading involves a close study of the text for its meaning and how it is conveyed, whereas extensive reading involves generally reading widely, usually for pleasure. Both types of reading have a role in the language classroom. The former is used basically to develop micro-skills and is characterised by short texts and a high proportion of tasks, whereas the latter is employed to give learners confidence, promoting pleasure and interest, and is characterised by longer texts with a low proportion of activities. Obviously these two types are related in that developing skills through intensive reading will help with extensive reading. It should be noted that intensive reading is more commonly used than extensive reading. Williams and Moran, (1989) suggest that this mode of reading should receive more attention due to beneficial improvement in other language areas such as writing or enrichment of vocabulary.

Although some authors (Wallace, 1992) explore the social context of the L2 reader, reading is usually conceived as a solitary activity in which the reader interacts with the text. Reading, in that sense, suits the principles of individualised learning. "Of all the language skills reading is the most private, and there is a problem in getting feedback on a private process.

The notion of privacy in reading can sometimes be related to learner needs [...] which may involve the teacher in the provision of some individualised reading in the programme" (McDonough and Shaw, 1993:112).

2.3.2 TEACHING L2 LISTENING

For many years less attention has been paid to listening than to the other skills (Oxford, 1993b) and it has always lagged behind and been influenced by research on the reading skill. Nevertheless, there is an increasing interest in listening as the most fundamental skill and this has been a central topic in language teaching and research in recent years (see Rubin, 1994 and Mendelson, 1998).

Bahns (1995) reviews five of the most important books at present dealing with listening on a theoretical level (Ur, 1984; Rixon, 1986; Anderson and Lynch, 1988; Underwood, 1989; Rost, 1991) and points out the considerable changes that the teaching of listening comprehension has undergone. These changes have been prominent in the following areas:

- *Materials*: reappraisal of the use of live speech and importance of teacher talk.
- *Structure*: a complex procedure which involves three basic phases of pre-listening, while-listening and post-listening. Each of these serves a particular purpose and has its special types of tasks.
- *Tasks*: the variety of tasks set has increased and the response to listening texts include a range of activities beyond the simple answering comprehension questions.
- *Grading*: an approach based on research into factors influencing the difficulty of listening texts and listening tasks.
- *Interaction*: developing listening comprehension involves the active use of different listening strategies and is seen in combination with developing speaking.
- *Learner Autonomy*: the importance of encouraging learners to engage in self-access listening in order to take responsibility for their own learning.

Listening is a language skill that is regaining its place in language methodology. Probably until recently the focus was too much on the product of listening and too little on the *process*. (Field, 1998) Focusing on the process allows for different types of tasks that try to

equip learners with the strategies and subskills necessary to cope with real-life listening. White (1998) stresses an interesting point that many of the listening tasks developed in recent years do not allow time for learners to reflect on their problems in understanding and on strategies they could use to overcome those problems. White (1998) provides a different approach where learners' reflection and learners' active involvement are paramount in the development of listening skills.

In that respect the recent trends in the teaching of listening focus on a 'strategy-based' approach (Mendelson, 1998) where strategy-instruction becomes the core of the listening materials or course design and its objective aims at teaching learners *how* to listen.

> "This is done, first, by making learners aware of how the language functions and second, by making them aware of the strategies that they use – i.e., developing "metastrategic awareness". Then the task of the teacher becomes to instruct the learners in the use of additional strategies that will assist them in tackling the listening task."
> (Mendelson 1995:134)

The importance given to the purpose of listening is also a key issue in the selection of material. In that sense, a distinction is made between *transactional* speech, with one-way transfer of information, and *interactional* speech, a two-way exchange of information between speakers (Brown and Yule, 1983). Obviously emphasis has been given to the latter in communicative language teaching since it interacts with other skills, mainly speaking. (for further reference on the listening /speaking connection, see Oprandy, 1994).

The standard distinction between *intensive* and *extensive* outlined above for reading also applies to listening. Thus, extensive listening is concerned with promoting overall global comprehension encouraging learners not to worry if they do not grasp every word; whereas intensive listening is more concerned with specific items of language focusing on sound and factual details. Both modes of listening are usually exploited in the language class.

Another connection between listening and reading which may be established is that, as we have seen, similar skills are required to be developed for improving learners' comprehension. 'Developing effective listening skills could well lead not only to improved listening but also to better reading' (Anderson and Lynch, 1988:20). Thus, despite differences of medium, we may also assume that in some cases developing reading skills could lead to more

effective listening. This, of course, needs to be substantiated empirically by research. (Lund 1991)

The use of video media (video tapes, television broadcasts, videodisks, CD-ROMs teleconferencing) for developing listening comprehension has increased in recent years. This fact has drawn attention to the complementary nature of the visual and auditory channels in listening. Gruba (1997) addresses the importance of the nonverbal signals of listening but observes that research on the role of visual elements is still inconclusive. Hoven (1999) describes the main areas of research for this aspect which include:

- The importance of visual context
- The role of non-verbal aspects of communicative competence
- Cross-cultural effects of non-verbal communication
- Messages conveyed through the visual channel
- Skills developed through the use of computer-assisted multimedia

Hoven emphasises that those studies have shown the importance of kinesics (i.e. body expressions, movements or gestures) in conveying and interpreting meaning and therefore an effort should be made to provide learners with that paralinguistic information in order to raise their awareness of the importance of those aspects. She advocates including the paralinguistic aspects of listening and viewing comprehension in the language learning process as they are an important part of the verbal communication.

2.4 MATERIAL/SYLLABUS DESIGN

One of the current approaches to materials and syllabus design is that described as the "task-based syllabus". This method of organising learning is based on the notion that teaching only has an indirect effect on learning and that meaningful communicative interaction is more significant than the language content learners might be exposed to. Consequently, activities in the class are designed to portray what takes place in real life. In a task-based syllabus, there is no overt linguistic pattern and tasks are selected on the basis of their potential to motivate learners in negotiating meaning. The emphasis is on the "how" rather than "what". The oft-cited 'Bangalore project' by Prabhu (1987) is probably the most representative of this type of syllabus.

The task-based syllabus is especially interesting with regard to strategic behaviour in that the features that make different tasks vary in difficulty and encourage different input and output are features which learners have to cope with using various kinds of strategy (McDonough, 1995). That is to say that if learners have, for instance, two minutes to read an article in a newspaper they will use a different strategy than if more time is allowed. Task designers then should consider the features that a task intrinsically has and the variables of its implementation in relation to the effect on learning behaviour. Research is needed "to discover how learners cope with and respond to the interventions in the learning process which the design features of language-learning tasks represent." (McDonough, 1995:126)

At present, however, there is not an accepted framework to use as a reliable basis for syllabus design. An interesting theoretical proposal for syllabus design is the general curricular framework outlined by van Lier (1996) based on three interrelated principles under the acronym of *AAA*:

Awareness: all new learning will be impossible unless it can be related to existing knowledge and experience. To learn something new one must first notice it.

Autonomy: the impetus for learning must come from the learner. Two key concepts are central to autonomy: choice and responsibility.

Authenticity: related to resources it refers to materials taken from the real world and not especially prepared for the language learner. Related to actions it refers to the following definition: an action is authentic when it realises a free choice and is an expression of what a person genuinely feels and believes.

> " [...] the AAA principles provide a crucial sense of direction. Students are encouraged to develop their language *awareness* (and other kinds of awareness that are intricately bound up with language: learning, cognitive, social), to become *autonomous* (i.e. have choices and responsibilities, and develop their own sense of direction), to strive for *authenticity* in their learning experiences in general and their language experiences in particular (this authenticity includes consistency, integrity, and respect, in addition to rich and varied sources and resources), and to recognize - and be recognized for - their *achievements*." (van Lier, 1996:19)

It should be noted that some authors have suggested adding *Achievement* to the proposed basic triad of AAA. This framework has direct implications to the design of the CALL

application since the three principles are the fundamental theoretical pillars on which the program is based (see Chapter 4, 4.7).

2.5 IMPLICATIONS FOR THE STUDY

The communicative approach has influenced most of the current methodologies used in language teaching. Most of the central ideas of this approach have, therefore, permeated the design of the CALL program and have had an influence on raising my interest in the topic of research. For example, the emphasis on the learner and the process of learning has determined the non-linear structure of the CALL application (for details refer to *Chapter 4*).

Regarding strategy training, most authors recognise that a cognitive understanding of what one does is not enough to guarantee success. The learner should also be aware of how to use a given strategy. That is the reason why the CALL module related to strategy training presented in the description of the design emphasises the "when" and "why" for strategy use as much as the "what". (Anderson, 1994; Wenden, 1995). The application offers not only practice for varied strategies but also information about the nature and purpose of a given task. This is based on the idea that learners should not be given practice for practice's sake but rather they should understand the reason why the learner is offered the opportunity to do a particular task, i.e. to develop a given strategy.

This feature of implementing information about strategy use is an essential characteristic for presenting learners with a self-instruction environment where the computer is seen as a tool for practice and as an information resource of language learning strategy use. In that sense, the CALL program allows the investigation of learning strategy use in a self-instruction environment. White (1995) points out that investigating the strategies that learners use to develop L2 skills within a self-instruction context is an avenue of research that can be of mutual benefit to both the learner autonomy movement and learning strategy research.

In self-directed learning one of the major issues is self-assessment. The first prerequisite is clearly to help learners see themselves as able to undertake their own assessment. One way to achieve this is to make learners aware of the learning objectives of a task. In that way, they will have criteria to evaluate their own performance. The computer can only keep track of activities done, some results - most of the time in numeric form - and at the most, in

sophisticated programs it can offer elaborated feedback. All these can obviously help in the process of assessing one's performance but they will not mean anything to the learner if s/he does not have criteria for judging her/his performance. This is the fundamental point that the design of the program has adopted for promoting learners' self-assessment.

Another implication for the design of the CALL program stems from the similarities in the teaching of both skills. The integration of listening and reading texts and tasks makes sense if we consider the common features of both skills and the common context in which these are presented. As the media is already being used extensively in class, it seems an appropriate extension to exploit them within a computer environment. Teachers use newspapers articles, radio extracts and TV broadcasts for different purposes but rarely in combination. In the CALL application presented one medium supports the other in an interrelated way to help learners' comprehension skills (for details of how learners may interrelate those media see *Chapter 4*).

Chapter 3
COMPUTER ASSISTED LANGUAGE LEARNING (CALL)

Computer-assisted language learning (CALL) is evolving so quickly and significantly that it is an exciting area of research. The advent of multimedia and the Internet have motivated an increasing interest in the use of computers for language learning around the world, which until recently was the concern of a small number of specialists. (Warschauer and Healey, 1998)

From a historical perspective, CALL practices have varied dramatically from their beginning in the early 1960s until now, since computing technology and theories of language and language learning have also evolved. The 1960s and early 1970s were marked by limited expansion since the use and availability of computers was equally limited. The early 1980s saw a boom in CALL due to the introduction of the microcomputer and the development of authoring systems that make it possible for teachers to have access to computers and start producing their own materials (Levy 1997). On account of this, CALL became part of the curriculum and teachers tried to integrate it into their lessons. However, there was a gap in the methodology of CALL, since CALL was not adaptable to modern methodologies, i.e. the communicative approach. There was a mismatch that did not help CALL to attract many teachers' attention. During the 1980s much CALL software tended to be restricted to particular subjects or problems of language learning such as the practice of specific structures, vocabulary or rules of grammar. The type of practice that was implemented, usually in gap-filling and multiple choice format, was often not chosen on the basis of the relevance and usefulness for language learning, but on the grounds of technical feasibility (Payr, 1991). Besides, the approach adopted was more in the way of testing learners' knowledge of specific points, and not of giving help in a supportive way. Earlier work on CALL was greatly restricted by the limitations of computer technology forcing the use of a methodology many years older than the current methodological practice employed in the classroom.

In the past decade, the 1990s, on the contrary, CALL has been advancing dramatically due to the advent of CD-ROM technologies and the Internet. The introduction of developments in multimedia hardware has increased the potential for more sophisticated software in line with current L2 learning/teaching practices. The advent of *Multimedia* has opened a new dimension in CALL. CALL software has now the *potential* to set more appropriate environments for language learning providing both language information and practice in an interactive way. "The integration of text, sound and visual data clearly is of great benefit to the learner as this will

reinforce comprehension, pronunciation and contextual use in a way that traditional materials are not able to do" (Evans, 1993:214). Furthermore, a multimedia CALL program with multiple resources built in can provide the opportunity to individualise learning according to different learning styles. As Warschauer and Healey (1998) point out, the multimedia networked computer is the technology of Integrative CALL, 'a perspective which seeks to integrate various skills (e.g. listening, speaking, reading, and writing) and also integrate technology more fully into the language learning process' (Warschauer and Healey, 1998:58).

The Internet has produced an unimaginable leap forward in terms of greater access to material, people and learning environments. (Levy, 1997) It has transformed the CALL panorama where the computer is seen not only as a tool for information processing but also for communication. In the next decade we will see new research studies based on Web resources which will feedback into the design and methodology of Language Learning Web sites.

The pace in CALL is accelerating with several innovations, new products and materials and therefore new possibilities for research. Example of these can be seen in several collections of articles such as Bush and Terry (1997) and Egbert and Hanson-Smith (1999). However, "amidst all this change, issues such as the role of the teacher and computer in CALL, optimal approaches to authoring, effects of the technology on the methodology, integration, and evaluation remain central issues, as they have over the last thirty years" (Levy 1997:44). Technically CALL now is closer to current theories and methodologies of language learning, but, as pointed out by Levy above, there are still lots of issues to be clarified and resolved. Agreed CALL research terminology is also one of the fundamental problems that are still unresolved if we want CALL research to take off in a scientific and consistent way, since CALL scholars need to know what all of us are talking about (Chapelle, 1998). There is still a long way to go to reach new horizons and probably a disadvantage is that the pace of the technology development is so fast that teachers and researchers do not have the time to resolve relevant basic issues. Besides, comparability of research studies, for instance, is difficult since the program used in a research study is most of the time restricted to that specific study. 'Still, research can give some insight into how technology can and should be used, even if there are no definite answers [...] Proof is elusive, but as more research is performed, we come closer to having a sense of the role that technology can and should play' (Warschauer and Healey, 1998:61).

The success of CALL will closely depend on the beneficial use of the computers, the programs and the research that will be carried out with them. Most materials are, still at present, developed and distributed without serious research into how best to use them. Evaluation is a critical part of the design process. (Chapelle, 1998) Another important issue is that of training teachers to make appropriate use of the increasing number of materials available on the market. The successful implementation of those programs will closely depend on the teachers' and designers' pedagogical purposes.

3.1 CALL RESEARCH

Until recently much CALL research:

- has focused on what the learners can do with the computer rather than what the learners *actually* do.
- has focused on outcomes rather than processes
- has been restricted to evaluation of specific programs and, most of the time, has considered only the attitudinal aspect of the learners; what MacWhinney (1995) describes as the 'smile coefficient'.

Some conventional research has attempted to compare the effectiveness of CALL as opposed to traditional methods of instruction. The standard design for this research is the pre-test–post-test experimental-control design where the experimental group works with the CALL program and the control group work with the material in a traditional way. This research comparing two modes of instruction, however, raises a lot of problems: e.g. difficulty of obtaining a post-test which is not biased toward either mode of instruction.

Although there is increasing research on the potential benefits of certain specific aspects of CALL designs and their effects on the development of foreign language learning, there is also an urgent need for research designs which establish adequate methods of investigating those aspects that make CALL an effective way of learning a language.

Garrett (1991) argues strongly that CALL should become integrated into a general research approach, which she calls CARLA - Computer-Assisted Research on Language Acquisition. This will have two main effects: an improvement in CALL pedagogy and an increase of prestige as a field due to being associated with a respected research area such as Second

Language Acquisition (SLA). From the perspective of Intelligent CALL, Matthews (1994) identifies shortcomings in Garrett's suggestion and proposes an alternative which implies a more "strong" research agenda than the one proposed by Garrett. Matthews does not exclude Garrett's proposal but rather suggests one that can be developed in parallel to Garrett's and one which may more strongly contribute to CARLA. In either case, the basic problem remains: lack of a sustaining methodology that could strengthen the links between CALL and SLA (Liddell, 1994).

Chapelle (1997, 1998, 1999) addresses the problem of the need for empirical research methods for CALL based on theory and research in instructed SLA (see below, point 3.2).

The computer's ability to organise and accurately record data on the learning history of individual learners is an essential feature to carry out this type of research on what learners actually do when working with a CALL program and hence, could serve to diagnose individual learning problems. However, it is limited in the quality of data that it can collect.

3.2 CALL AND LEARNING STRATEGIES RESEARCH

The sophisticated computer capabilities of storing and sorting information allow for investigation into the nature of the learner-computer interaction. At one level, knowing how a user interacts with the computer is one of the most rapidly developing subjects in computer science, and there is at present a considerable research literature on human-computer interaction (Preece *et al.*, 1994). At another level, learner-computer interaction has been a major issue in the educational technology research agenda, in particular in educational software design (Borsook and Higginbotham-Wheat, 1991). As for the language-learner-computer interaction research, it is just starting to be developed (Cumming *et al.*, 1994).

One of the most essential questions on the language learner-computer interaction is to know what learners do when working on CALL activities. An early study in the search for an answer to this question is the work by Chapelle and Jamieson (1986) who, investigating the effectiveness of CALL in the acquisition of a second language, examined some of the learners' cognitive/affective characteristics and working styles. They concluded that CALL cannot be evaluated without looking at the learner variables; it is necessary to assess the

characteristics of the learners together with an analysis of the approach taken in a particular program or CALL activity.

In a subsequent study, Jamieson & Chapelle (1987) studied learning strategies employed when learners worked with a computerised spelling and dictation lesson. This study concluded that learning strategies need to be considered together with cognitive style and that computer collection of strategy data is a reliable method for examining strategies on different tasks over a long period of time. In a 1988 article they outlined five learner variables - age, expectations, ability, cognitive style, and affect - to be considered in examining computer materials. They conclude, however, that the study of learning processes in CALL presents a difficult problem of data analysis and interpretation which stems from attempts to match to areas that are not well understood: SLA and courseware use.

Chapelle & Mizuno (1989) took the framework of the previous studies a step further by examining learner strategies while working on learner-controlled CALL grammar lessons. This research identified five strategies learners were assumed to be using:

- *Resourcing*: learners' requests for help about target language, i.e consulting dictionary or grammar references.
- *Practice*: formal practice of the materials.
- *Self-monitoring*: attending to and correcting the formal elements of the language produced by oneself.
- *Self-management*: understanding and creating conditions for one's own learning. This is observed by the learners' choices and their adoption/rejection of advice messages provided in the feedback.
- *Self-evaluation*: self-evaluate their ability on the task.

These strategies undoubtedly correspond to elements of learner control present in the design of the application. For analytical purposes, they classified the above strategies between *low-inference* ones, i.e unequivocal evidence of learner's use of strategy, and *high-inference* strategies, i.e. requiring judgements about the function or meaning of a particular behaviour. In that way, the interpretation of the former sub-set could be interpreted algorithmically to determine the amount of strategy use whereas the other sub-set was used to determine whether learners employed those strategies at all.

Chapelle (1990), keeping on this line of research, suggests a new way of interpreting data collected to analyse language learner-computer interaction. Her objective is to compare the learner-computer interaction of classroom activities with that shown in CALL activities. She proposes a discourse analysis of the learner-computer interaction where learner and computer are seen as participants in a dialogue. She argues that the discourse analysis system of classroom interaction developed by Sinclair and Coulthard (1975) provides the necessary elements to described what she called *CALL Discourse*. Following this procedure,

> "[...] results will be more comprehensible and generalizable if definitions of investigated strategies are phrased in terms of students' acts performed within a defined domain of possible discourse.
> Examination of variation in students' acts within the framework of defined contexts (type of exchanges, transactions and lessons) holds the key to long-awaited progress in research on the relationship between types of instruction and particular student characteristics." (Chapelle, 1990:221)

Chapelle (1994) develops her suggestions further by trying to explain how the concept of *genre* is useful for investigating similarities among the types of interaction produced in CALL activities, which she describes as *CALL texts*. (see Table below). These texts are produced in any language learning context where the computer takes an interactive role.

Text D: student working on ESL reading comprehension questions:

The student has just completed the first two paragraphs of an interactive passage about conductivity in materials. The following exchange occurs as the computer poses comprehension questions:

		Functional moves
Computer:	What is a source of power which is the cause by electron flow in material? It's called →	Initiation
Student:	electron	Response
Computer:	= ↑	Feedback
	Almost Try again	[evaluation - wrong] Follow-up

Figure 2.1 Example of **CALL Text** *(Chapelle, 1994:38)*

On the basis of her study, she identifies three distinct but interrelated levels of analysis:

- *text*: refers to the actual data that result when participants interact with the computer either individually or in groups
- *genre*: summarises CALL texts to allow for meaningful generalisations
- *context*: refers to features of activities, topics, participants and language that comprise the text and in which the text is embedded.

She concludes that before we start to address quality issues of different CALL software we should document and analyse the actual CALL texts to identify elements believed to be significant for language learning.

Her emphasis is on discourse analysis and on the "interactionist" approach to SLA.:

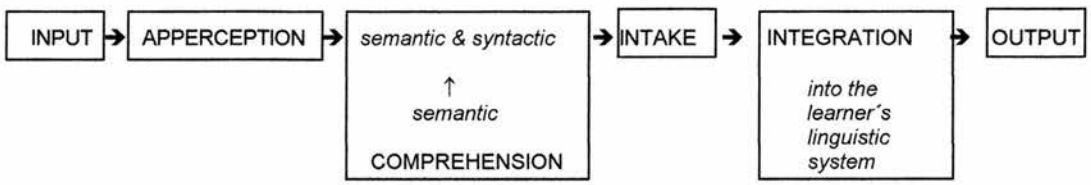


Figure 2.2: Basic components in the SLA process in interactionist research (Chapelle 1998:23)

Based on this model Chapelle (1998) reviews the following seven hypotheses relevant for the development of multimedia CALL:

1. The linguistic characteristics of the target language input need to be made salient.
2. Learners should receive help in comprehending semantic and syntactic aspects of linguistic input.
3. Learners need to have opportunities to produce target output.
4. Learners need to notice errors in their own output.
5. Learners need to correct their linguistic output.
6. Learners need to engage in target language interaction whose structure can be modified for negotiation of meaning.
7. Learners should engage in L2 tasks designed to maximize opportunities for good interaction.

She then exemplifies how these could be implemented in Multimedia CALL material and research methods to evaluate it. Evaluation can be done taking a *process-oriented approach* in two ways: one, observing the interaction between the computer and the learner, as stated above, and two, using introspective methods 'to gain evidence about the learners' goal-oriented strategies while they are working on L2 tasks.' (Chapelle 1998:29)

From all this research we should acknowledge that Chapelle (1990, 1994 and 1998) opens a novel perspective that promises progress on the research of learning strategy use, instructed SLA, and CALL.

Most recently Liou (2000) discusses the assessment of learner strategies in the CALL context. Types of strategies include cognitive and metacognitive strategies such as resourcing, monitoring, practising, or self-evaluation. She describes two interesting studies: the first one where 20 EFL students worked on a video multimedia lesson and their on-line history of help requests was recorded in a log file; the second one where 14 students performed a reading activity in which the text had links to an online dictionary and students' word consultation was recorded by the computer. The data provided insights into the interaction between the learner and the computer input, from which researchers can infer the strategy use based on what learners are actually doing in the CALL context. The computer data help applied linguists to better understand CALL processes, and 'provide researchers in other fields with a new horizon where different sources of L2 learner data can be triangulated to help uncover the SLA phenomena.' (Liou, 2000: 165)

3.3 MULTIMEDIA CALL AND THE RECEPTIVE SKILLS

Multimedia CALL suits perfectly the learning of receptive skills: reading and listening comprehension. The possibilities of incorporating audio and video create a perfect 'mini lab' to exploit those skills in a more integrated way than the traditional way of playing a tape recorder and doing the corresponding exercises in the workbook. The importance of multimedia in language learning is that it can integrate material in a way that other media such as textbooks cannot. "If one wishes, one can watch a video, listen to a conversation, explore an online glossary, consult a grammar, and record one's own pronunciation..." (Ingraham and Emery, 1991:329). This multidimensional feature allows for the integration of skills more easily than before and transforms the learning process into more a holistic and active learning experience.

3.3.1 CALL & READING COMPREHENSION

Hypertext allows for enriching a text by branching to dictionary entries, translations, paraphrases, background knowledge of the text, grammar notes and exercises arising from points of difficulty, and even pictures and audio rendition. The power of cross-referencing is an essential feature for helping learners in foreign language reading. A wide variety of explanatory or contextual material can be linked to texts to make them easier to understand. This multidimensional facet is what renders multimedia of great benefit to foreign language learning.

Reading involves an array of processes, assuming that skills at all levels (from graphic features to world knowledge) are interactively available to process and interpret texts. As outlined previously, when reading we are incorporating both top-down and bottom-up processing in a parallel process in which the interplay of decoding and comprehension is complementary (Grabe, 1987). CALL software may assist learners in all those processes at all levels in an easier and more coherent way. Its hypertext capability can help learners with both bottom-up and top-down processes when necessary, compensating for learners' weaknesses in either process at any level.

In that sense software for reading can promote, for instance, what Wyatt (1989) states as high-level reading skills:

- recognition of referential relationships: stylistic considerations, anaphora, cataphora., etc.
- grasping rhetorical structure of discourse.
- use of schemata.

While difficult to develop in print these could be practised easily using hypertext owing to its great flexibility of retrieval and display.

Another example of assistance would be in developing what we call low level reading skills. Everybody has experienced the painful and frustrating process of starting to read in another language. The knowledge of the target language at this stage is so slight that when engaged in the reading, the usual consequence is that learners tend 'constantly' to consult external sources, such as bilingual dictionaries and grammars, in order to assist in the comprehension of the text. Even at more advanced levels, learners tend to rely upon bottom-up processing of decoding the text in a word-by-word fashion. Thus the flow of reading is constantly interrupted and, most of

the time, the thread of understanding the text is lost due to short-term memory constraints, forcing the reader to go back constantly to restart the reading flow. As a result, reading in that way using traditional methods is tedious and disruptive. The advance of hypertext, then, is that the task of referencing could be done with more ease and speed, making the inevitable disruption in the reading process less painful for the comprehension of the text. As decoding becomes easier, more cognitive capacity can be made available for top-down comprehension. Consequently, learners can pay more attention to other aspects, such as the syntactic and semantic cues of the text, and thus improve their reading comprehension.

However, there is a danger in giving too many explanations, either to assist bottom-up or top-down strategies, which would still greatly disrupt the reading. Consequently, Galletly *et al.* (1992) point out that the ideal is that this information:

- is optional
- contains many layers and facets
- is specifically about well-defined points of the text
- is many times quicker than a printed dictionary or grammar

(Galletly *et al.* ibid:27)

These are essential features that a multimedia CALL designs should implement if we want to lighten the disruption problem in L2 reading due to using too much complementary information.

From the issues outlined so far, it is clear then that reading in multimedia adds different cognitive processes, e.g. processing visual and/or auditory information, that should be taken into account. Chun and Plass (1997) propose the following model of text comprehension in Multimedia environments:

> "On a micro level (e.g. vocabulary acquisition) the presentation of visual information contiguously with verbal information results in the construction of referential connection between the verbal and the visual mental representations of the material, and the storage of the information in two different systems, a verbal and a non verbal (dual coding). On a macro level (e.g. overall text comprehension), visual information serves as an aid for text comprehension and functions as a supplemental information that is added to the mental model of the text mapping the analog visual representation onto the analog mental model. The visual information can aid in text comprehension in three different functions: (a) in selecting information, (b) in organizing the selected information into coherent structure of proposition using cognitive schemata, and (c) in integrating these propositions into the mental model." (Chun and Plass, 1997:66)

Chun and Plass (1997) also point out that in some circumstances there could be deleterious effects processing verbal and visual information such as task interference between modes of processing, the directing of attention, and the learners' individual differences. They concentrate on learner variables that are directly related to multimedia reading: verbal and spatial ability, visualizer and verbalizer learning preferences, content and background knowledge. They also underline that individual differences are one of the most relevant factors in studying L2 text comprehension using multimedia. Research on multimedia reading, therefore, should concentrate on understanding the processes of how people integrate verbal and visual information. These processes are determined by *individual differences* information.

> "The primary research question is not whether multimedia instruction is effective, but rather under what conditions and for whom. This means that studies should be designed to determine the effectiveness of specific features of multimedia materials for specific types of learners, for specific learning tasks, and for specific cognitive processes."
> (Chun and Plass, 1997:72)

In addition, well-designed instructional features of the multimedia material is another essential key to allow this type of study being proposed. The design should be formulated taking into account the processes at macro or micro level above outlined and be adaptive to individual differences, so learners can, for instance, receive different types of additional information and/or in the mode they prefer or need.

Most recently De Ridder (2000) argues the case for evaluating some of the additional features of CALL materials designed to enhance second-language reading comprehension. His study analyses the effects of highlights indicating a link towards dictionary definitions on the second language reading process. The results, apart from demonstrating that randomly highlighting words in a text on screen influences the amount of vocabulary incidentally learned by the reader, also strongly indicate that reading in a highlighted setting is different from reading a text in an unmarked form:

> "the results did reveal that the two conditions created lead to two fundamentally different ways of processing a text. In the marked text, students felt conditioned to follow the links presented. Almost every definition provided was consulted, which resulted in a shift of focus from reading to learning vocabulary intentionally."
> (De Ridder, 2000:192)

Coincidentally, these results are in line with one of the premises in the design of the multimedia program presented in this thesis. It was decided not to implement hypertext links for vocabulary definitions since it was thought that this CALL design enhancement could

directly affect the reading process and not promote reading strategies, which is one of the program's objectives. (For further discussion on this point, refer to Chapter 4, 4.4)

3.3.2 CALL and LISTENING COMPREHENSION

Multimedia CALL suits perfectly the development of programs where listening is the main objective of the design. The integration of different media in one interface should prove to be a useful feature for the development of second language listening. The integration of video is seen as particularly useful to provide more realistic tasks for the computer environment. We usually have visual clues, such as gesture, which generally support the processing of the spoken input. Thus listening without visual context is communicatively inauthentic (except of course on the telephone or radio) and unreasonably difficult for learners (Garrett, 1991b). Thus, we may use the potential of video sequences in multimedia CALL to bring more authenticity to the listening tasks. Exploiting listening activities without this feature would be not using the multimedia environment to its full potential. However, even using multimedia CALL in the simplest way, i.e. only providing sound, may still provide an exciting environment to enhance listening comprehension due to other features that are not available in other media. For instance, a multimedia CALL program could allow learners to work under real time constraints bringing an aspect of authenticity to the task. But, at the same time, this could be manipulated - e.g. speed of delivery - for various purposes - e.g. to lighten the cognitive processing load involved in listening; or simply to facilitate more individualised control for the learner in terms of replay, rewind, etc. to assist in their listening process. Moreover, the multimedia environment may allow for providing textual support on-line to the listening (e.g. transcripts, glossary help, structural clues, translations) as a sort of help to accommodate different learners' needs and to alleviate the panic of the 'not-understanding-anything' state that some learners suffer with listening comprehension tasks.

Multimedia CALL for listening is at the early stages of development but the rapidly increasing interest, manifested in more software available in the last few years, promises fruitful results. There is still a long way to go regarding design issues but research on this area could help to solve these problems. However, research on multimedia listening is scarce.

One study found in the literature is an experiment by Jakobsdóttir and Hooper (1995) who developed a CALL lesson to study the effects of text, context and gender on listening

comprehension. The study was carried out with children learning Norwegian. Among other results, they found that presenting spoken language with text appeared to assist the development of listening skills for novice language learners. One explanation for the benefits of text is that it may help learners with bottom-up processing.

At the level of design, we should acknowledge the work of Brett (1995) who designed a multimedia-based resource for developing listening skills within the field of Business English. The program is designed having in mind theoretical issues of autonomous learning. It provides a variety of instructional options and learner choices which help learners to adapt the learning experience to their own needs and learning styles.

Most recently, Hoven (1997, 1999) proposes an instructional design model appropriate for humanistic multimedia Computer-Enhanced Language Learning (CELL) in a self-access environment for second language learning through listening and viewing comprehension. Her model is based on socio-cultural theory and research into listening and viewing comprehension, individual differences and learning styles, characteristics of self-directed and autonomous learning and instructional software design. The features of this elaborated and complete model are

> "I: Total learning environment characterised by a task-based and/or process-based syllabus and focus on
>
> A. Learning strategies (learning how to learn)
> B. Language function and purposes
> C. Language structures
> D. Paralinguistic features
> E. Sociocultural features
> F. Autonomy and self direction
>
> II. Focus all activities on the development of control and responsibility for own learning.
> III. Cultivate learner self-direction and autonomy.
> IV. Provide access to facilities for multi-channelled perception/production.
> V. Cultivate self- and peer-feedback and evaluation techniques among learners (to improve self-confidence and group cohesion).
> VI Design CELL activities that incorporate self-exploration and self-discovery of problems and errors.
> VII. Provide a range of print material as well as those commercially available and on the Web." (Hoven, 1999:94)

This model is perfect for research studies in different aspects of the multiple areas on which it is based, e.g. learning strategies and styles, and multimedia listening. Research, therefore, on how learners work on this model will feedback in the design and improvements of the model presented. Hoven (1999) has provided a big step forward in integrating essential aspects of second language learning into a CALL environment.

3.3.3 CALL and HELP FACILITIES

The earliest interest in this topic was manifested in two papers presented in the EUROCALL 1991 Conference held in Helsinki. Fleissner *et al.* (1991) were concerned with the question of how to teach a language by computer and promote the use of learning strategies. They reported the development of CALL courseware for German students learning English, and particularly they discussed the options of help facilities that were likely to be included in such programs. They introduced the idea of *hint* in the feedback where the learner receives clues about the type of mistake s/he has made. The underlying idea of the program is to guide the learner to develop a metacognitive concept, self-monitoring of performance, in regard to the language task. Their main concern is in a program design that can promote strategic thinking in slow learners.

On a more theoretical level, Fox & Matthews (1991) provided a general discussion of the design of CALL help systems in relation to learner strategies and learner needs. They maintain that learner strategies are consistent with humanistic approaches that emphasise and encourage learners to become autonomous and take responsibility for their own learning. One way of achieving autonomy is through the use of computers and in particular through help systems. They outline the principle, called *wherewithal*, - bringing the necessary information to help the learner complete a learning task - which every program should follow. CALL designers should not set learners tasks to complete without providing them with the means to discover the necessary information for themselves. In that sense, systems following this principle need a large and complex database with information. Another aspect of wherewithal that they point out is learner training. They suggest the "*availability of benign but unobtrusive guidance*" as an interesting aspect to consider. A CALL program could offer learners suggestions if wanted or simply supply a list of varied alternatives.

Other authors have reported observations and research either on the design of help facilities or learners' use of computerised help.

Jones (1992) reported from casual observation that learners who used the Help key more often were at a lower level of attainment than that at which the material was pitched, suggesting that help messages must operate in the area at the limit of a learner's competence to be genuinely helpful. In designing CALL materials for Eurocentres, she identified four strategies for formulating Help messages:

1. *Giving part of the answer*: the reason for this seems to be to help the learner to recall the correct answer.
2. *Limiting the range of possibilities*: the reason is to focus the learner on the pursuit of the correct answer reducing the amount of possible answers.
3. *Going part of the way*: in tasks that require a process of sub-tasks, the help message is designed to begin a sequence where the learner should complete it.
4. *Indicate a fruitful strategy*: help indicates which rule or principle to apply.

On an experimental level, Meskill (1991) tries to assess the effects of on-line messages which suggest learning strategies to the user. The study reports an experiment using an interactive video database with and without advice messages. Although some results seem not to be conclusive, qualitative data gathered suggest that materials with advice regarding learning strategies may be potentially helpful to learners with less effective language learning strategies.

Some other research has concentrated on more particular issues related to help facilities, e.g. dictionary consultation:

One of the first studies was carried out by Hulstijn (1993). He explores when foreign language learners look up the meaning of unfamiliar words in a reading activity using the computer, which compiled log files of all the word consultations for each learner. Hultstijn used *relevance* and *inferability* factors to observe the look-up incidence of the target words. The results showed that learners looked up the meanings of the *plus relevant & minus inferable* words most frequently and least often the *minus relevant & plus inferable* words. He concludes that 'the decision to look up the meaning of a word in a FL text is clearly influenced by the perceived relevance of the word. It is only modestly influenced by the reader's vocabulary knowledge and it is not influenced by the reader's ability to infer word meanings from contextual information' (ibid:146). In another study Hulstjin and Trompter (1998, cit. Hulstjin, 2000) investigate incidental vocabulary learning after dictionary look-up under two conditions, reading and writing processing. The results showed that the number of words looked up hardly differed between readers and writers and regarding retention they conclude that it was higher among writers but conclusions could not be drawn as the test was built on the basis of learners' look-ups. Hijlstin (2000:38) points out that 'the study proved to be only a rather superficial measure in that it only revealed, *that*, *when* and *in which order*, but not *how* the students processed the lexical information'.(emphasis in original) They plan to conduct a similar experiment

introducing either think-aloud protocols during completion of tasks or stimulus to recall their look-up behaviour.

Another recent study was conducted by Laufer and Hill (2000) to investigate a relation between what is looked up about new words when different kinds of information are available and how well these words are remembered. The CALL dictionary facility in the program provides different lexical information (explanation in English, translation into L1, sound, root and extra information) about highlighted low-frequency words on a text. Learners were asked to read the text on the screen and understand it so they could take a comprehension test. The computer log files registered learners' dictionary consultation of highlighted words. After task completion they were unexpectedly tested on meaning recall of the target words. The results of this study suggest that programs that cater for a variety of look-up preferences may be more favourable for incidental vocabulary. Lauffer and Hill, however, did not demonstrate conclusively that "a particular look-up behaviour yields the best results. Nevertheless, the results suggest that multiplicity of lexical information tends to be associated with better retention" (ibid: 72).

Another help facility under recent investigation is the use of transcripts and subtitles. As those facilities are becoming standard features in more multimedia programs, researchers are beginning to draw attention to their implications in the design and the use learners make of these. Borras and LaFayette, (1994:70) in their research study concluded that "the opportunity to see and control subtitles [...] results in both better comprehension and subsequent better productive use of the foreign language." Regarding the use of transcript, Murray (1999) reports from a diary study research on the use of an interactive video that learners felt that the possibility to access a transcription was necessary to understand, helping them in their aural recognition skills. Certainly more research is required in this area.

The role of feedback in CALL is another issue largely discussed in the literature. The main issues discussed in the literature are (to mention but a few, some research studies and discussions are indicated):

- Immediate or delayed feedback (Nagata, 1993, 1995)
- Modes of feedback: written, spoken or both (Batiano, 1992)
- Negative and positive feedback (Robinson, 1991, Brandl, 1995)
- Self-discovery or program disclosure (Robinson, 1991, Van der Linden, 1993)
- Explicit and implicit feedback (Robinson, 1991)

All this research, however, has focused mainly on grammar exercises. Issues such as when it should be given, what kind, how detailed, how often are essential for the design of the program. Nagata (1993:331-332) commenting on the issue of immediacy of feedback states:

> "the issue is not simply whether or not immediate feedback brings about learning effects; the effects of immediate feedback depend on what instructional goal is posed, what skill is focused on to develop, what type of learning task is required and what kind of error analysis and feedback is provided in the program."

The objective of the task is probably the core issue since it determines the type of task and so the type of feedback to be provided.

Learners' preferences for one type or another are mainly determined by individual differences, especially learning styles (Oxford, 1995). If learners learnt differently, the assistance provided should obviously be different. The concept of assistance comes from the Russian psychologist Vygotsky. According to Vygotsky, learners have a Zone of Proximal Development (ZPD): the distance between the actual development level and the level of potential development under the guidance of a more experienced other. The concept of the ZPD, therefore, is directly related to the provision of effective help to cater for the learners' needs in their own particular developmental process. To cater for individual assistance, e.g. individualised feedback, is what research and design of most Intelligent CALL (ICALL) is aiming at in this area. Research on handling random learner input, however, is still rather limited, and therefore makes individualised feedback difficult to implement.

For the moment, as Brandl (1995:209) concludes in his study:

> "[...] the issue at stake here [...] is not so much an ideally tailored feedback message, but rather the impact of various kinds of feedback on the students' learning process [...] generically stated explanations may not meet the needs of each particular student. Nevertheless, they may have a positive influence on students' reasoning process and aggregately work to help them with their questions."

3.4 CALL DESIGN ISSUES

Designing effective CALL software is no mean task. At the least, this task requires a high level of understanding in a variety of disciplines. Underlining the production and design of a multimedia CALL application, we need a suitable framework that helps us to conceptualise our work at theoretical and practical levels (Davey *et al.*, 1995). We need to take into account theories and research carried out in a variety of disciplines to form the backdrop to our design work. (Pujola, 1997) The following general disciplines should be taken into account:

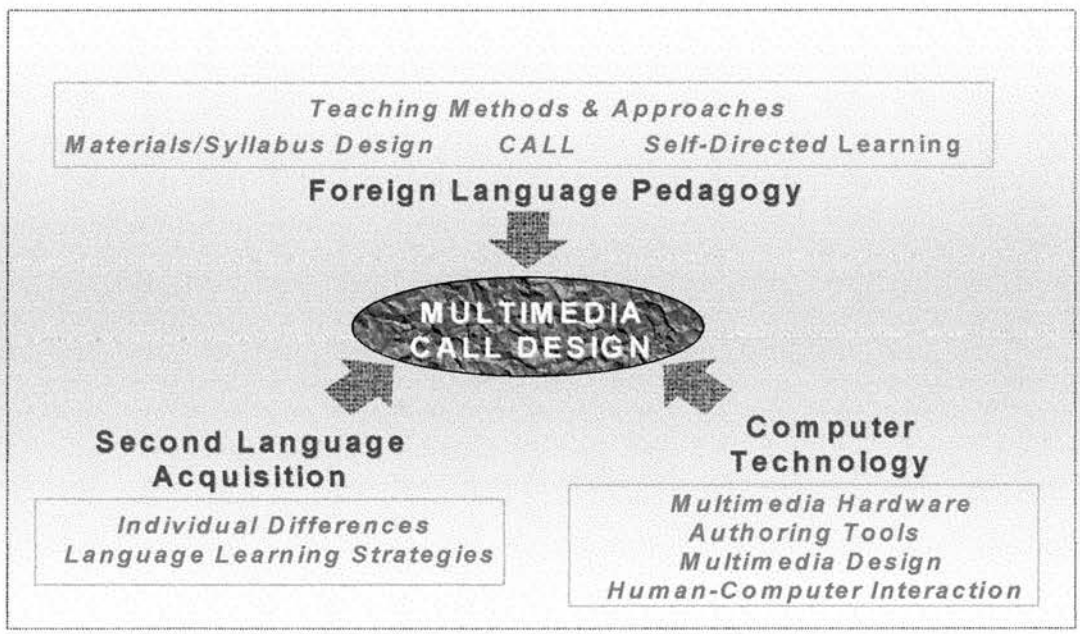


Figure 3.1 Multimedia CALL design framework (Pujola, 1997)

Theories on these areas of research will be the starting point in the design process and could provide the best way to develop an application that attempts to combine state-of-the-art pedagogy with state-of-the-art technology. Caution, however, must be taken when transferring theory to practice since most of the disciplines and areas outlined above in SLA and Foreign/Second language teaching are still polarised in discussion of many relevant issues; and as regards technology, the rapid changes make it every time more difficult to keep up with the pace of future possibilities. Nonetheless, this framework serves the purpose of delineating the areas to be considered in CALL design. If, then, we want to evaluate the program we should add competence in the areas of *research methods* and *statistical analysis*.

Hubbard (1996) proposes a more detailed CALL methodological framework for the development, evaluation and implementation of CALL material. His proposal is based on Richard and Rodgers' framework (1982, cit. in Hubbard 1996:17) which is described in terms of three interacting levels: *approach*, *design* and *procedure* and Phillips (1985, cit. in Hubbard 1996:18) typological framework, which distinguishes seven categories: *activity type, learning style, program focus, learner focus, language difficulty, program difficulty* and *classroom management*. His developmental module constitutes an array of interrelated areas influencing the CALL courseware production:

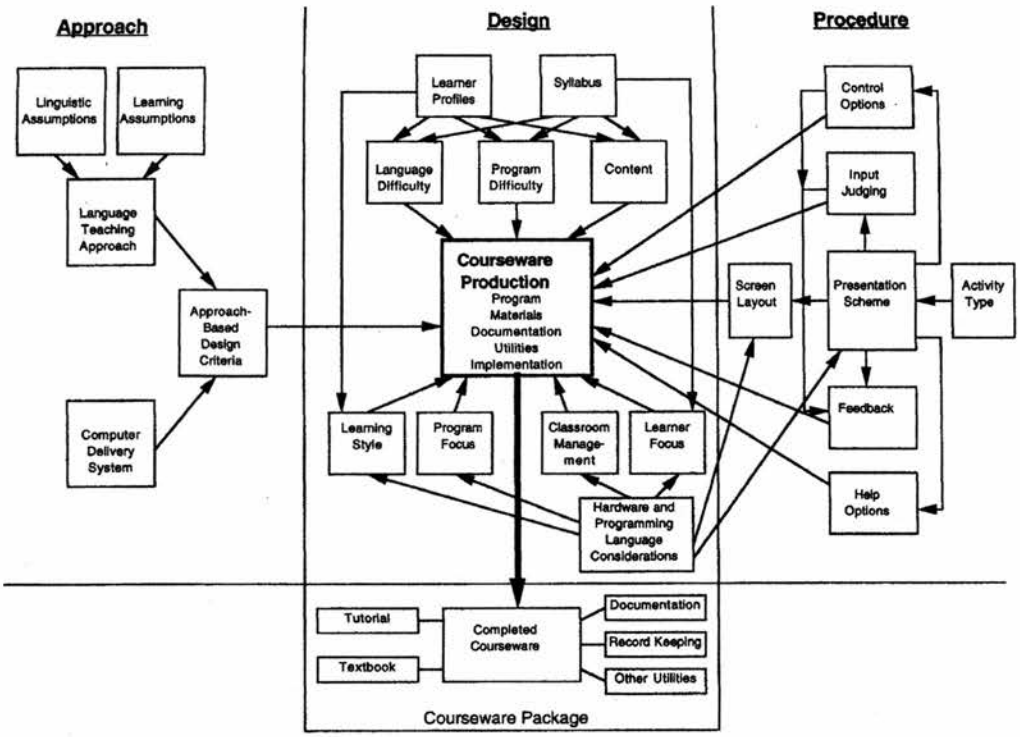


Figure 3.2 : Developmental Module (Hubbard, 1996:19)

Hubbard (1996) then describes an evaluation module, and finishes with an implementation module. Those modules, although extremely important, are not described here for reasons of time and space. The Developmental Framework illustrated above (Figure 3.2) makes it clear the many areas and aspects to be considered and their interrelations when developing any CALL courseware or program .

From a general educational perspective, Cates (1992) states 15 interesting principles for designing more effective instructional hypermedia products for all subject areas:

1. Match current curricular emphasis.
2. Match current teaching practice.
3. Match current instructional time restraints.
4. Provide the capability of tailoring the product to meet specific teachers' needs.
5. Make the database easily accessible for use as a research tool.
6. Make the database expandable.
7. Design the product so that it helps learners develop their inquiry skills.
8. Encourage learners to think about what they know and what they are learning.
9. Design a "user-friendly" learning environment.
10. Think of a videodisc as more than just a full-motion video repository.
11. Include video segments that make effective use of the medium.
12. Be careful to use good writing and correct spelling and punctuation.
13. Make the product interactive in meaningful ways.
14. Emphasise context, not just isolated facts.
15. Provide print materials that are at least as valuable as the multimedia database.

These are prescriptions drawn from different areas addressing technical, curricular, educational and practical issues. It is worth drawing attention to the first three since the author adopts the position that instructional hypermedia products should be implemented in a non-disruptive, non-radical way in the educational environment. Taking account of the effects technological innovation and change can play, we assure some sort of success since the users, either teachers or learners, are able to cope with the changes and can easily appreciate the potential value of the materials. It would be later when designers could move forward with more innovative applications and new uses of these.

Similarly, a problem to be solved in CALL is the above-mentioned mismatch between current foreign language methodology and CALL. While language learning pedagogy has been developing to a more humanistic, process-oriented approach, most CALL programs have concentrated on product and solving linguistic deficiencies. Seedhouse (1996) suggests several ways of solving this problem. One suggestion is to promote more meaningful and more human interaction between the learner and the computer. Nonetheless, interactive applications can be very complex to design if we want to aim at programs where the tasks are beyond the point-and-click type of activities. The possibility of linking different kinds of information in a multimedia CALL program raises some challenging questions about the organisation of pedagogical materials. For example, to what extent should lexical entries of a dictionary be

directly linked with the text provided? Research on such questions will have important implications for design as well as for understanding language learning behaviour.

Stevens (1992) discusses humanistic issues related to CALL describing the following as the main characteristics for a humanistic CALL environment. A program should:

- focus on learning rather than teaching
- be learner-centred
- promote discovery-learning
- promote autonomy
- provide authentic materials
- prompt communication
- provide control over modalities for learning in an attempt to compensate for individual differences

It is generally recognised that learning styles should be taken into account when designing a course (Oxford, 1995; Thierry, 1996; Seedhouse, 1996). This is a prerequisite if we want CALL ever to achieve the goal of individualised instruction. One way of achieving this prerequisite is providing learners with a myriad of choices over the sorts of activities they want to engage in, in terms of approach, ability, learning style and learning strategies. This multiplicity of options, however, calls for other problems such as the issue of learner control discussed in the next point, to be considered.

3.4.1 LEARNER CONTROL

"Learner control is justified by the beliefs that learners know what is best for them and that if learners are in control of the instruction, they will invest more mental effort in their learning. Hypermedia use is premised on learner control." (Jonassen and Mandl, 1990:16)

Learner control is an issue widely discussed in educational technology literature since its potential possibilities to increase learner motivation can develop self-learning ability and thus yield the best learning achievement. However, Viau and Larivée (1993) point out that the reports of research into the effectiveness of learner control are still ambiguous and contradictory

and that the only clear conclusion is that "the weaker a learner's prior knowledge, the less benefit is derived from learner control" (Viau and Larivée, ibid:11). Park (1991) goes beyond this assumption and underlines the possible reasons why learner control is not effective for instruction:

> "a/ the student usually does not have sufficient knowledge about the content to be learned and therefore cannot make decisions on the selection of learning content and strategies.
> b/ the student may not have the metacognitive ability to accurately assess and predict his/her own learning progress.
> c/ the student may not have appropriate cognitive strategies for applying his or her experience and knowledge in the learning process."
> (Park, ibid:27)

His conclusion is that the learner control principle should not be used in hypermedia based instructional systems unless learners have the appropriate prior knowledge, cognitive strategies and metacognitive ability. This view is understandable if complete learner control is introduced in the instructional environment without a coherent analysis of the learner's context. Thus handing complete control to a beginner may be as ineffective as forcing an expert through an easy tutorial task. Besides, having control without having enough knowledge could create in the learner a sense of impotence to cope with any task in that environment and thus have a negative effect. Hammond (1991) points out that "although there are situations when it is appropriate to let the learner loose with full power of the hypertext system, more often than not it would be counter-productive" (ibid:118) since, as research evidence reports, learners tend not to make the best decisions (Jonassen and Mandl, 1990). This raises the question of how much control should be given to the learner. Hammond (1991) states that the optimal level of control depends on the following factors:

- the nature of the learners
- their familiarity with the materials
- their learning goals
- the nature of the knowledge domain.

Learner control is also related to the issue of interactivity: the essential aim is that the learner is meaningfully interacting with and dynamically controlling the information. Obviously if the computer has a lot of control then the learner is engaged passively in any activity and the system merely acts as a provider of information. If we want the learner to think actively (the main aim being to yield effective learning), we have to encourage active engagement giving learners

appropriate control depending on the factors above outlined. Thus, Borsook and Higginbotham-Wheat (1991) state that increasing learner control is not proportionate with increasing the quality or quantity of interactivity, i.e. optimal interactivity occurs when there is a balance of control between the human learner and the computer (see Figure 3.3):

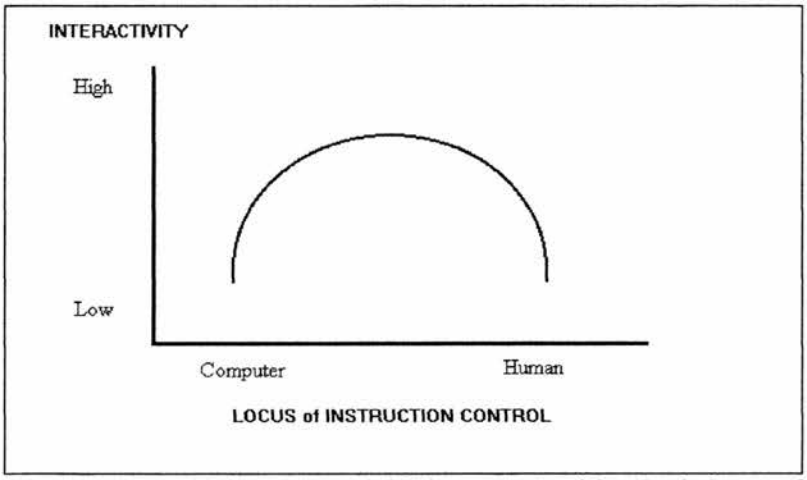


Figure 3.3: The highest interactivity is represented by the balance of control between learner and computer.(Borsook and Higginbotham-Wheat, 1991:14)

In language learning, the freedom of choice over what information to access and what direction to pursue can be seen as an obstacle to language acquisition (Evans, M. 1993). As Marchionini (1988:10) puts it, "freedom to learn is not sufficient a condition to assure effective learning [...] a rich learning environment can become an environment of 'hyperchaos'." Or as Sciarone and Meijer (1993:101) conclude "when students are left free to choose how and when to use CALL, their choices may result in poor learning [...] CALL programs should provide students with this role of the teacher by constraining their freedom to choose."

As in everything in life, balance is the answer. However, giving prominence to one or the other will directly depend on the learners' preparation:

> "Clearly, *being put in charge* and *being in control* are not synonymous. In CALL, *student control* of the process is often akin to being put in charge of one's learning without having developed the competencies to be in control (i.e. to succeed at the language task). Such premature and unguided *student control* should be avoided until the learner has developed the language competencies to succeed." (Robinson, 1991:158) (emphasis in original)

That is why some educators think that some sort of degree of control may be necessary to ensure learning. The same balance of freedom and control applies for self-access learning where careful guidance should be provided since learners may not know automatically how to organise their own learning and even less to evaluate it.

The issue of *guidance*, therefore, is fundamental in handing control to the learner, if, of course, we want to promote learner control. Barnett (1993) states: "[...] being surrounded with resources is not the same as being resourceful." (ibid.: 296) "[...] even offering choices is not sufficient,[...] some learners cannot cope with choice because they lack the necessary strategies." (ibid:301) He advocates that programs can be used to train learners in learning skills. "[...] A program which permits no guiding messages, no matter how efficiently it responds to learner input, is not desirable "(ibid:301)

Garrett (1995) pointed out in the quote used in the *Introduction* of this thesis that learners do not pay attention to help materials. Guidance in how to use the resources available in a CALL program could be seen as the determining element for the development of learners' effective use of strategies and at the same time, for giving them more control over their learning. With regard to learner control in language learning, Garrett claims that there is no research evidence that a high-degree of learner-centeredness necessarily benefits language learning. "If learners themselves do not understand their own styles and strategies, the language learning process, or the relationship between these, then we may not be doing them much good by turning over control on the learning activities to them" (ibid.1995:347).

The issue of control is also related to the issue of feedback (Robinson, 1991). Guidance and feedback are the core features of the oft-cited *magister* role of the computer (Higgins, 1988) or using more recent terminology, the *tutor* role of the computer in CALL (Levy, 1997). However, Levy (1997) points out that to delegate responsibility to a computer, for instance, in terms of evaluating the language learner, should be considered carefully and not allowing the computer a more powerful role than the one it has. He underlines that

> "Provided that the students know in advance that the computer is *identifying* possible problem areas and not making immediate correction, then the role of the computer is clear. Such approaches also fully utilize the student's intelligence. Provided the students are clear about the role of the computer, and any limitations a computer tutor is known to have, then they will not be drawn into ascribing to the computer an infallibility that is not be warranted, and they will use their own judgements to filter the feedback they receive. It should be emphasized, however, that students expect a

> computer tutor to give the right advice on all occasion – the students' default setting so to speak is that a computer tutor knows what it is doing."
> (Levy 1997:213)

In that approach, the learners have to make an effort on their part taking the responsibility to self-assess themselves by filtering the feedback received and thus taking control of their own learning. The computer, for its part, should offer feedback in the form of guiding the learners to the possible sources of error. In that respect we are utilising the computer in order to promote learning strategies for self-assessment while trying to balance the level of control and interactivity between the learner and the computer.

3.5 IMPLICATIONS FOR THE STUDY

The current advancements in technology allow us to develop pedagogically-sound applications which are not too detached from the reality of the language class. Producing a multimedia project, however, requires more than having perfect infrastructure and high technology at one's disposal. One needs to make use of multiple skills and take into account different areas of knowledge and expertise. Those skills may be available in a single individual but are more likely to be present in a team of individuals. Therefore, successful multimedia projects are assembled by teams of specialists in several areas. As that ideal team in the present study was non-existent, I sought help and advice from **multimedia programmers, graphics designers and teachers of English** to develop, design and implement the project.

The design of the CALL program should be undertaken taking into account a process of evaluation. Hence, CALL design is closely connected to CALL research. Results from the research study presented will provide us with insights not only into design issues but also into the process of learning a language using computers. The design of a program undoubtedly influences how learners interact with it and observing this interaction will provide us with information to improve the design of that program. Thus, if we are looking into which strategies learners use, 'we should not make a priori decisions about which styles and strategies are to be particularly favored or encouraged but should rather use the data collection capabilities of the computer to carry out research that will give us much understanding of the problems' (Garrett 1995:347). The prerequisite for that, though, is to create a flexible environment which will allow for different interactions to occur.

Multimedia offers a rich environment in order to apply that program flexibility needed for observation on how learners operate. Furthermore, multimedia allows for integrating resources and materials in a way that is not possible in classroom settings, facilitating learners some tasks but at the same time confronting learners with an environment in which they will certainly need to deploy new strategies. Research, therefore, is needed to investigate how learners operate in these integrated environments and observe which strategies they use. In the present study, the types of language learning strategies which are of interest are those related to the use of the help facilities, mainly **resourcing** but also inferring strategies, clarification, exploration, self-management and self assessment. As we mentioned in Chapter 1, strategies do not occur in isolation but are interrelated. We also want to link strategy data to information about CALL task features to see how tasks influence strategy use.

Together with the multimedia technology we have now availability to Internet resources which can be used to ease the development of the program. Moreover, it can provide us with information on how learners use those particular Internet resources, e.g. Internet dictionaries, an avenue of research which CALL researchers need to begin to explore as the Internet and the Web are growing fast in their use in language classrooms and self-access laboratories. The present research can describe the intrinsic characteristics of these resources, which, of course, imply a different use from a CD-ROM environment where the CALL dictionary is usually resident on the actual computer or an Intranet server.

As I have illustrated in this Chapter, the issue of learning strategies operating in a CALL environment and the use of help facilities have been researched in only a few studies, and from differring perspectives. Most of the latter research has been limited to a few aspects. The study proposed here will attempt to offer a broader perspective. Hence, variety of help facilities will be a prerequisite to allow for different strategy use depending on the particular needs of the learners. Thus, knowing how different learners make use of those facilities will assists us in understanding the potential of the program and at the same time, the process that learners employ in comprehending a foreign language. CALL can now in that respect provide us with insights which were unimaginable a few years ago: 'information systems have the capacity to foster the development of learner autonomy because they help us gain access to processes that otherwise can easily remain internal, implicit and relatively undeveloped' (Little, 1996b:218).

Of all the relevant CALL design issues the notion of learner control is perhaps the most fundamental. There are areas of the design that are more open to learner control than others, e.g. choice of materials or task type, choice of resources, requesting feedback or hints, etc. From the research perspective, though, we constrain the choice in some areas to allow for comparison between learners. Thus, for instance, choice of exercise is not implemented at this stage, since all learners need to go through the same tasks and exercises to allow for comparability. However, we introduce at various points choice of approach to the task to observe the preferred learning strategies that learners use in accomplishing those tasks. The interactivity between learner and computer is determined by the rationale behind the design of the software. In the program presented in the next Chapter the notion of choice is considered in a way that the choices learners have to make enable them to operate to a certain degree of autonomy with which they feel comfortable trying to balance computer control and learners' freedom. As already mentioned in this Chapter, guidance is paramount to encourage learner autonomy which is one of the main objectives of this CALL application.

Chapter 4

DESCRIPTION AND RATIONALE OF THE ARCHITECTURE OF THE MULTIMEDIA CALL PROGRAM

4.1 INTRODUCTION

Having introduced in the previous chapters the theoretical issues that influence the design of the program, we now turn to the description of the actual program and its rationale. Initial ideas of the prototype are described in Pujola (1997) but some modifications later on were implemented to suit research purposes and to accommodate some technical aspects. The description that follows, however, is on line with the initial objectives of the program:

From the teacher's point of view, the application assists in certain aspects of language learning where individualised learning is required most, i.e. reading and 'transactional' listening comprehension.

From a learner's perspective, the CALL program enables learners to manage help resources in such a flexible way that cannot be imagined in a traditional environment with different resource facilities. It provides this information at the click of a button making the process of performing any task, such as reading a newspaper article or doing a language activity, faster and less disruptive.

From a researcher's perspective, the CALL program provides a perfect tool to investigate into learners' reading and listening processes and into the use of help resources in a combined way that cannot be conducted in a conventional environment.

4.2 GENERAL DESCRIPTION OF THE PROGRAM

ImPRESSions© is a Web-based multimedia title intended for self-study to help learners of English in their comprehension skills regarding news in newspapers, on television and radio. The targeted users are learners of English from pre-intermediate to advanced levels. For the research study the prototype targeted Spanish learners.

ImPRESSions is a multimedia program, i.e. video, audio and written text, using multi-media, i.e. TV, radio and newspapers as a source of language input. The combination of the media is seen as the core structure of the program in that the same news item can be accessed in different media. Not only does this feature provide practice in reading and listening but it also provides support to learners' linguistic and background knowledge which may improve their comprehension skills. Another important feature of the application is that some specific input on reading and listening strategies is also introduced.

Initially this application is designed for research purposes and runs under the Windows™ operating system using an Internet Browser such as Internet Explorer™ . The application has been written in HTML 4.0 for its main structure and content, and in JavaScript for the most interactive features, e.g. exercises and feedback. HTML and JavaScript are the most approachable and popular scripting languages for the Internet environment. This would permit the program to be delivered on the Internet. However, for the research study the program was used locally on one computer, although interacting with some Internet resources.

4.3 GENERAL APPROACH TO THE PROGRAM

The following are the core principles that encompass the design of **ImPRESSions**. The application

- focuses on learning rather than teaching or testing
- is learner-centred
- promotes discovery-learning
- develops language learning strategies
- promotes autonomy
- provides authentic texts from several media
- provides a flexible environment to cater for different modes of learning in an attempt to compensate for individual differences.

The organisation of this program allows for a non-sequential educational approach to learning and caters for different individual needs. The materials are organised in a non-linear fashion where the learner can navigate freely through the content of the project, unbound by predetermined routes. It is designed in such a way that encourages the learners to explore and

develop their cognitive and metacognitive strategies in the processes of learning a language, in particular those more related to the developing of reading and listening skills.

One of the main features of the program that promotes the principles listed above is the provision and design of the help facilities.

4.4 RATIONALE OF HELP FACILITIES

Help facilities are understood here as the resources of the program which assist the learner in performing a task. The help facilities in **ImPRESSions** are divided between *Assistance,* those that provide learners with help for comprehension of the text, and *Guidance*, those that are related to the tasks and give help in performing them (Table 4.1). It should be noted that the *Assistance* type also help in performing the activities since one needs to comprehend the text in order to work on the activities provided. To make a more clear distinction, we could underline that *Assistance* facilities are related to cognitive strategies whereas *Guidance* facilities are more related to metacognitive strategies.

Assistance: Help for Comprehension	• Dictionary • Cultural notes • Transcript • Subtitles • Replaying and Rewinding controls • Feedback: Explanations
Guidance: Help for Tasks	OPERATIONAL: • Information on how to use the program • User's guides for the radio & TV consoles • Instructions
	LANGUAGE LEARNER TRAINING: • Instructions: purpose and/or advice provided • Experts module: reading & listening strategies • Information on how to make appropriate use of Transcript and Subtitles

Table 4.1

The *Assistance* type are help facilities which are called upon when there is a knowledge limitation and are, therefore, directly related to compensating strategies, i. e. either the learner or the program should compensate for that knowledge limitation. (Figure 4.1 below)

The fundamental issue in designing help facilities in **ImPRESSions** is how to provide sufficient scaffolding for the development of learners' comprehension skills. If the CALL program does not, for instance, provide *Assistance* for some areas and the learner is unable to compensate for knowledge limitations, s/he will be unsuccessful, becoming demotivated and giving up on working with the program. However, less direct access to a help facility in some parts of the program could well promote learners' use of compensation strategies. For example, the ease of access to the dictionary in a hypertext format could result in or be the result of laziness on the part of the learner who may not consider even trying to infer the meaning of a word and go directly to consult the definition as pointed out by De Ridder (2000). Thus, making the access to the dictionary less accessible may prompt the learner to make more use of compensation strategies such as inferring meaning of words in context.

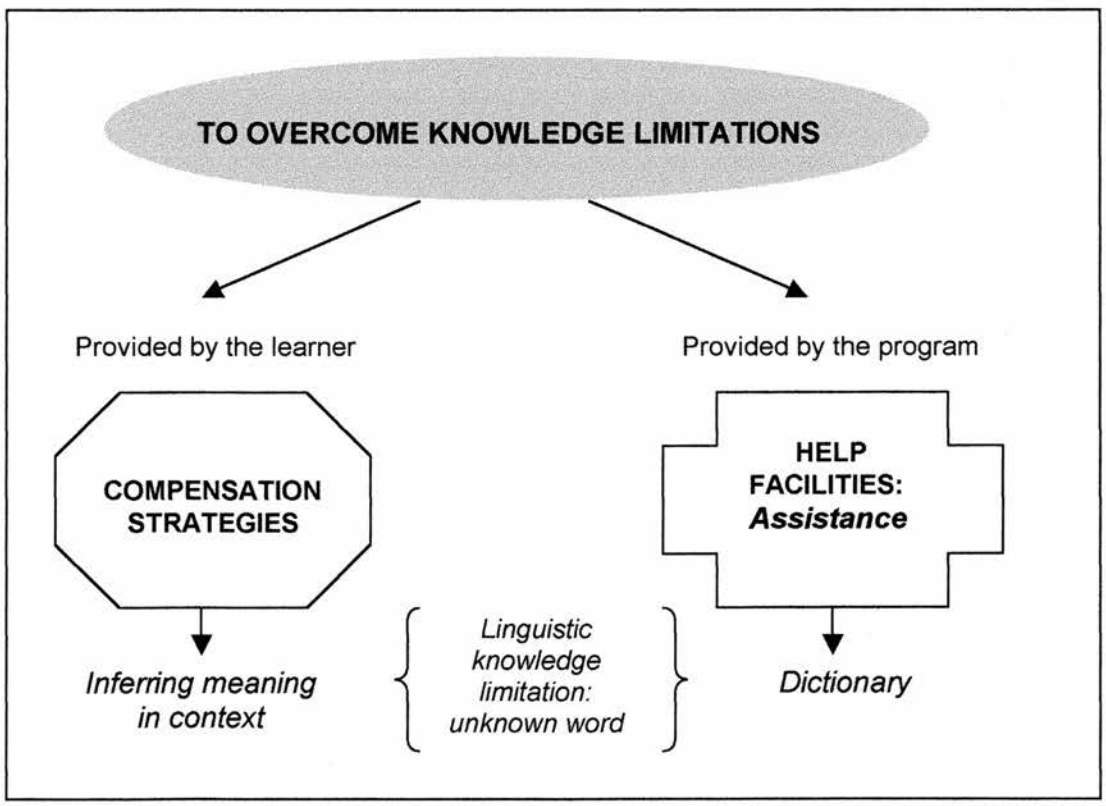


Figure 4.1

This is the reason why the access to the dictionary in **ImPRESSions** is not, for instance, provided in a way where learners access definitions from a highlighted word on the text in a hypertext format. In this sense, this feature reflects the ultimate goal of **ImPRESSions**: to promote strategies to cope with authentic situations in the real world where help resources often are not at hand. On the other hand, regarding cultural information our approach is completely different. If learners lack some background information, it is more difficult for them to compensate for that knowledge limitation. Thus, hypertext links to *Cultural notes* have been provided in a way the learners can easily access that information if required.

Careful consideration on which way to provide help has been taken into account. Different ways of presenting *Assistance* facilities can call for different learning strategies and designers should state clear objectives in terms of what they intend learners to use. Whether learners then use them in the intended way is a question for the research study.

The fact that the learner can access a text on the same news item from other media may help learners in their comprehension. This is an intrinsic feature of the design of **ImPRESSions'** structure and therefore not considered an added facility. Thus, in the *Assistance* type we have not included this feature which can also help learners' comprehension.

With regard to the *Guidance* facilities (Table 4.1, above), we should point out that the *Operational* ones are also intrinsic in any software design, e.g. instructions, program information, user's guides of some technical features. However, it is in the way they are envisaged that may prompt to activate metacognitive strategies. In particular, we are referring to the design of the *Instructions*. Instructions in **ImPRESSions** not only describe what the learner is going to do but introduce three main characteristics:

- purpose of the task
- options on how to approach it
- advice on how to work

In that respect, we classified *Instructions* as a component in the Language Learner Training element of the program. The *purpose* of the task is always described so learners are at all times aware of the purpose behind the task, e.g. to improve a particular strategy. On the other hand, the *options* feature is not always implemented but introduced at different moments to activate metacognitive awareness. These two features are described in more detailed in *section 4.6.* below.

Regarding *advice* we should point out that it is not introduced in a prescriptive way and is closely connected to two other *Guidance* facilities: *the Experts module* and *information on the use of transcript and subtitles.* These two *Guidance* facilities are the essence of the learner training element of **ImPRESSions** and differ from the *Assistance* facilities in that consulting them may not be exclusively prompted by lack of knowledge.

The *Experts* module comprises advice on reading and listening strategies and the *use of transcript and subtitles* introduces suggestions on how to work with these two help facilities in order to promote different listening skills.

Access to both facilities were thought as optional mainly for research purposes, since we want to observe who consults them and the reason why those learners consult them. Hence, experience tells us that although we can observe that some learners may need that information, most adult learners at the level the program is intended have implicit or explicit knowledge about language learning strategies and make use of them. Therefore, forcing them to go through that information was not thought to have any benefit. Our premise here is that learners will benefit more if they have the intention to know more on these aspects in order to improve their own way of working or simply to experiment with different ways of working. The danger, then, is that learners may ignore these *Guidance* facilities. Provision, however, was made to attract learners' attention to those facilities in the *Instructions* and *Feedback*, e.g. if the learner's performance is poor, a message reminding them to consult the *Experts* is provided. We are trying indirectly to make learners aware that there is a possibility that the strategies they are using may not be adequate or that the learner may not be using them fully or that simply there are other strategies which are also effective. Poor performance may not be the direct consequence of poor linguistic but strategic ability. Thus, we invite learners to consult the Experts, making them aware that this option is available. We had the premise in the design process that simply providing options to learners, such as the Experts module, by no means ensures that learners will use them, thus the need for reminding learners that these relevant options are available. The Experts module is fully described in point 4.6.4 below.

The amount of help provided is also a significant issue in the design process. Cost-effectiveness is a factor to be considered, since research has proved that providing lots of resources does not entail effective use. Thus, devoting time and money to creating multiple help resources could be counterproductive. A compromise should be reached by trying to establish a balance between cost-effectiveness and learning effectiveness. Variety of help facilities, though, is a prerequisite on

research grounds: having varied help facilities and options allows for looking into which type of learners use which help facilities - the essence of the research study.

As for **ImPRESSions**, varied help facilities were thought out on pedagogical grounds: research on learning styles suggests that different learners need different modes of assistance (Oxford, 1995):

> "Concrete-sequential learners want to be told what to do and exactly how to do it, whereas intuitive learners want to find their own answers in their own (often ingenious and random) ways. Thinking-oriented learners want factual feedback, whereas feeling-oriented learners require greater emotional support. Analytic students enjoy an emphasis on accuracy and detail, whereas global students desire an emphasis on meaning and breadth."
> (Oxford, 1995:367)

Thus it seems sensible that varied options should be introduced to cater for the different styles, e.g. different provision of feedback, choice of dictionaries, and choice between transcript or subtitles.

To sum up, the help facilities introduced in **ImPRESSions** are intended to encourage and stimulate cognitive and metacognitive processes necessary to develop language learning, especially those related to reading and listening skills.

4.5 THE STRUCTURE: THE FOUR MODULES

The structure of the programme has been designed to enable learners to control the management mechanisms in a user-friendly way. Consistency of interface design and navigation tools has been maintained throughout the program.

The content is structured in four main modules, Newspaper, Radio, Television and Experts, which are interconnected and can be accessed at the beginning of the program or within one of the other modules. They are represented by four icons:

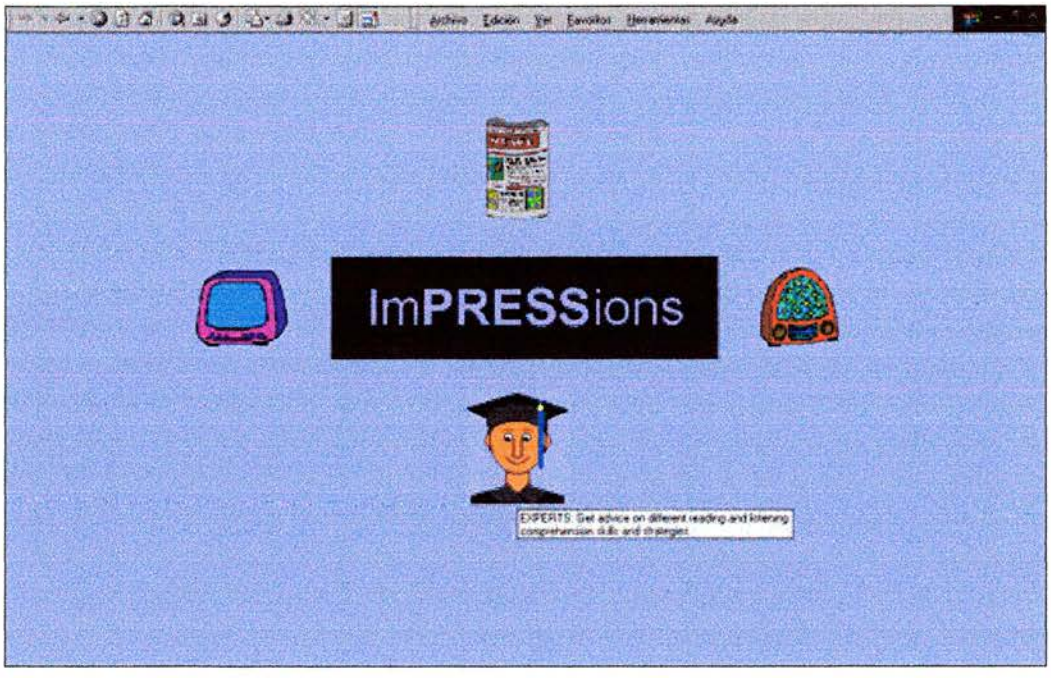


Figure 4.2

Placing the mouse over the icons and the title, learners obtain a brief description of the module in a message box for a couple of seconds (as seen in Figure 4.2). This feature is consistent throughout the program where icons are introduced in order to avoid misinterpretations of what the icons really mean. Clicking on the title a smaller external window pops up (Figure 4.3) where the structure and content of the program is described using hypertext links. This information can also be accessed in the different modules or parts of the program under the heading of HELP. When accessed from within one of the modules, the information provided only refers to the area the learner is in at that moment instead of providing all the information of the description of the program, which is only accessible from the main page.

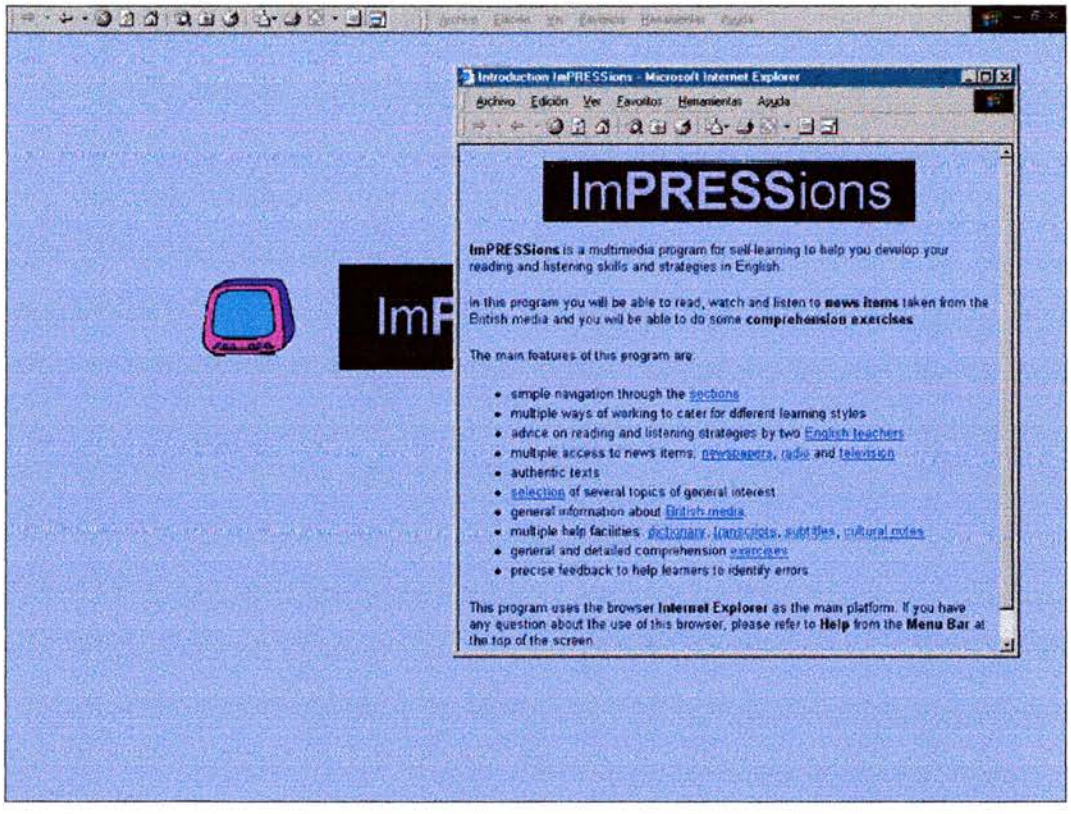


Figure 4.3

The learner may choose to enter any of these modules depending on what s/he wants to start doing:

- **NEWSPAPER** - read an article
- **RADIO** - listen to the radio news
- **TELEVISION** - watch the television news
- **EXPERTS** - get advice on comprehension skills or strategies

In order to maintain consistency, the first three modules are organised in the same way. Thus, we now turn to the description of the Newspaper section in a chronological sequence and then, taking this module as the basis, we will describe the differences that the Radio and Television modules introduce.

4.5.1 THE NEWSPAPER MODULE

Once the learner clicks on one of the icons of these modules, for instance, the Newspaper, the learner accesses a Contents page which includes a list of news items classified as if it were from a contents section of a newspaper under headings such as Home, Politics, Crime and International. News items were not listed using their headlines but with random letters. (Figure 4.4) The reason behind that decision was related to maintaining authenticity for one of the tasks, in which learners read the article for gist as if they had opened a newspaper and encountered the news item for the first time without any previous knowledge of the news. It is what we call **First Encounter**.

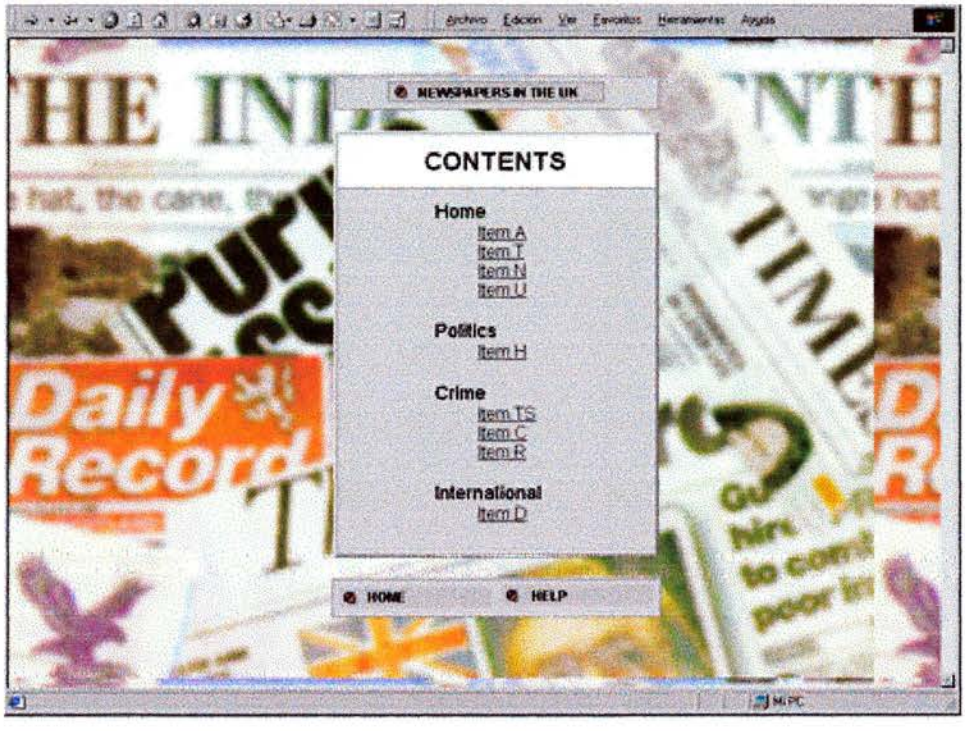


Figure 4.4

The purpose of the First Encounter is to portray an authentic situation where one opens a newspaper or turns on the radio or TV, as we do in real life, and begins to read or listen to obtain clues as to what the news item is about. The idea therefore to provide learners with the headline was discarded, since it advances them information too soon in their minds for the practice of some strategies. This decision does not imply that we are not in favour of preparing or "warming-up" the learner for the reading task activating their 'schematic' knowledge. In terms of preparing the learner's mind, at this stage we include the headings of the classified items which provide the general topic of what the news is going to be about. This, in turn, is what happens in real life

where at least we know what the topic of the news is, since when we are reading an item, we know the page we are on, which corresponds to a section of the newspaper entitled with one of the headings included in our contents menu.

On the same contents page there is also a button, above the main menu, where learners can obtain general and cultural information about newspapers in the UK. Such information includes a list of different types of newspapers, their political views, readership etc. Thus this section provides more general 'schematic' knowledge to some learners who may lack or be interested in that information. This button is also introduced in the Contents page for the Radio and the Television modules which introduce similar information on British radio stations and TV channels.

Once the learner chooses one of the items from the Contents page, that particular news item section opens. The screen presented to the learner is then divided in three main areas (Figure 4.5):

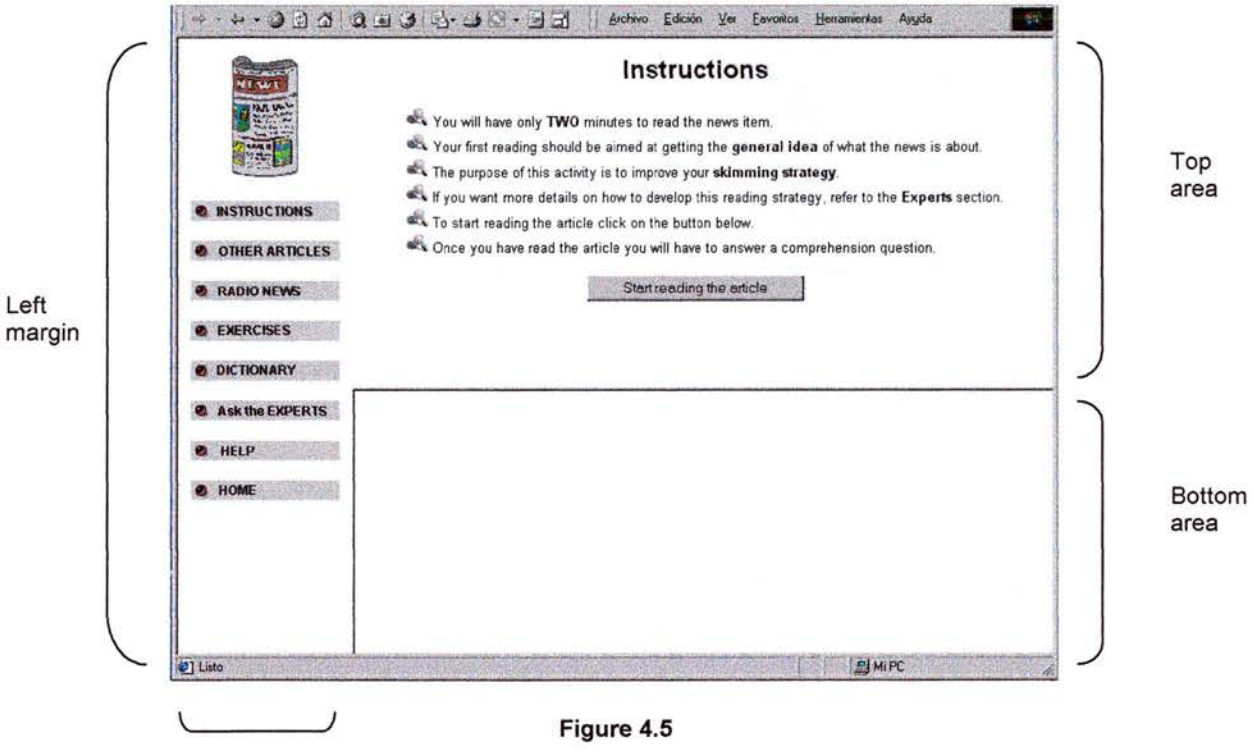


Figure 4.5

Left margin: buttons that provide access to

- Instructions
- Other articles of the same news item from different newspapers
- Same item of news but on other media: radio or TV
- Exercises
- Help facility: dictionary
- Experts module: direct to reading comprehension (as we are in the Newspaper module)

- Help: description of this section of the program
- Navigational button and icon: back to homepage or to contents page of Newspaper

Top area: Instructions

Bottom area: Blank (at first but area where the exercises download)

This division of the screen is also consistent in the other two modules, Radio & Television. The left-margin buttons are navigational in nature to move around the different sections of the program. Moreover, control of the navigation can be done by using the navigational buttons and menus of the browser, in our case, Internet Explorer ™. These buttons can handle the necessary functions for learners to control their navigation patterns throughout the program and add functionality, for example, access to a printer. The following are the most useful ones to assist the navigation and functionality of **ImPRESSions:**


Back: move back a page, clicking on the ▾ symbol, a selection menu of the last pages is displayed


Forward: move forward a page, clicking on the ▾ symbol, a selection menu of the last pages is displayed


Stop: stop the downloading process


Refresh: refresh a page to original state


Home: goes back to homepage


Print: print the document downloaded

These icons are common to most browsers and thus help the learner to feel familiar in an environment not alien to their usual browsing the Internet.

As the research was conducted in Spain the browser used for the experiment was a Spanish version of Internet Explorer, thus all the menu titles were in Spanish instead of English.

4.5.1.1 The texts

The texts were selected initially taking into account our research study, as they have special features which are of interest: they include vocabulary that is repeated in various texts to allow repeated exposure, varied expressions, specific aspects of British culture, etc.

Articles were taken from a variety of British newspapers and cover a wide range of topics of general interest, mainly on social and cultural issues to avoid the problem that the topicality of news is short-lived. However, some news items, which are more short-lived due to their political, economic or historical features, were selected specifically for the research phase. These introduced specific cultural and historical information that allows us to see more clearly how learners deal with those news items when they know or lack that background information.
The texts and tasks are included in Appendix B.

4.5.1.2 The tasks

A taxonomy of tasks and exercise types was initially thought out to develop a variety of strategies. However, due to time and technical constraints the implementation of the tasks had to be restricted to a small number. The present limitation does not preclude the incorporation of other tasks and exercise types, e.g. drag-and-drop, open questions, matching, etc, at a later date. The focus of the research study was not on the tasks but on the help facilities learners used to perform those tasks. In this sense, some tasks would prompt the use of some facilities and not others. As the choice of task was determined by this factor, the design concentrated on two of the most often exploited comprehension tasks where learners can display an array of different strategies in order to perform them.

Two main tasks are included in **ImPRESSions** for exercising reading comprehension:

	SKILL to be developed	Exercise type
Task 1	reading for gist	Multiple-choice
Task 2	reading for detailed information	True-False

Table 4.2

We should recognise our concern for these exercise types since they are usually conducive to raising learners' feelings of being tested, as they are common types in reading tests. Moreover, this type of exercise encapsulates a methodology away from the communicative approach, which this application tries to pursue. We should recognise that the principle for a

communicative purpose of the tasks included in this program differs from the usual communicative reading or listening comprehension where the communicative purpose is to extract certain information in order to perform another task. In that sense reading is part of a bigger task and it will depend on the comprehension of that text to successfully accomplish that task. In **ImPRESSions** we can distinguish between the task and the exercise. The exercises are not communicative as such but they are part of a communicative task. The communicative purpose of these tasks is to develop skills and strategies that can then be transferred to real life. Besides, in real life often we don't do anything with the news we read or hear. We just accumulate knowledge of what is going on around us in the world and probably use that as 'schematic' knowledge later on.

Moreover, one of the main premises in the design of the application is to concentrate on comprehension, so production either in oral or written form may distract from that aim. The two main reasons for using these types of exercises are:

- Learners do not have to write anything so we are not cognitively overloading learners with their ability of writing skills and can, therefore, concentrate on comprehension. In that sense, we have restricted the exercise types to those that require minimal free-form learners' output. Furthermore, the computer does not need to analyse possible problems of grammar, discourse, type of vocabulary used or typos that learners may make in writing the answer.

- The software facility to handle random learner input is still relatively limited. It is, therefore, technically more viable to provide more precise feedback of the possible source of error in the comprehension of the text and not mix comprehension errors with possible errors from their writing.

Instructions of the **first task** displayed on the top area of the screen explain not only what the learner is going to do (Figure 4.5 above) but the *purpose* behind the task, raising conscious awareness of strategies. Some *advice* is also provided in that if learners are not sure of the strategies to be used or developed in the task, they can consult the *Experts* module to obtain further advice.

All the instructions in the program have the following characteristics:

- Short, only one sentence.

- Displayed in bullet points
- Some words are emphasised with bold font, to draw learners' attention.

The reason for these is mainly to try to avoid the oft-cited problem that learners often do not read instructions.

Whenever learners feel ready, they can click on the Start-reading-the-article button to access the article. As stated in the instruction the text opens for only two minutes, so the learner has to read for gist in order to answer a general comprehension question which will have access at the end of the two minutes. The article appears on the top area (Figure 4.6a). Learners may enlarge the area if so they wish. Learners can resize the top and bottom areas whenever they feel appropriate to have an extended view of the text. (Figure 4.6b)

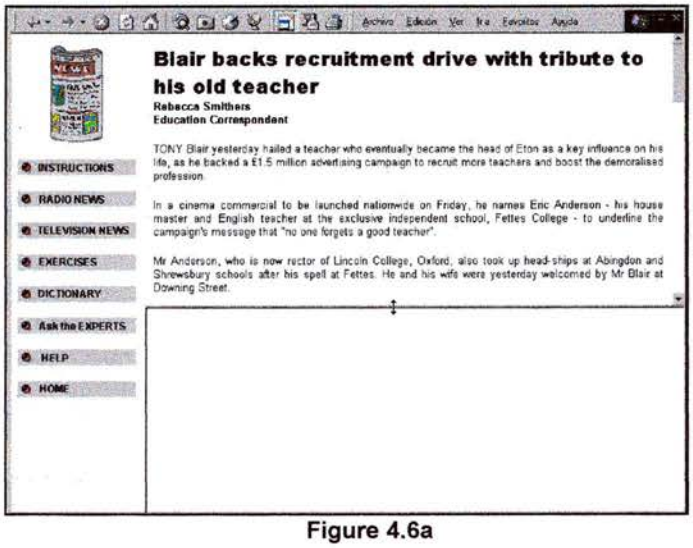


Figure 4.6a

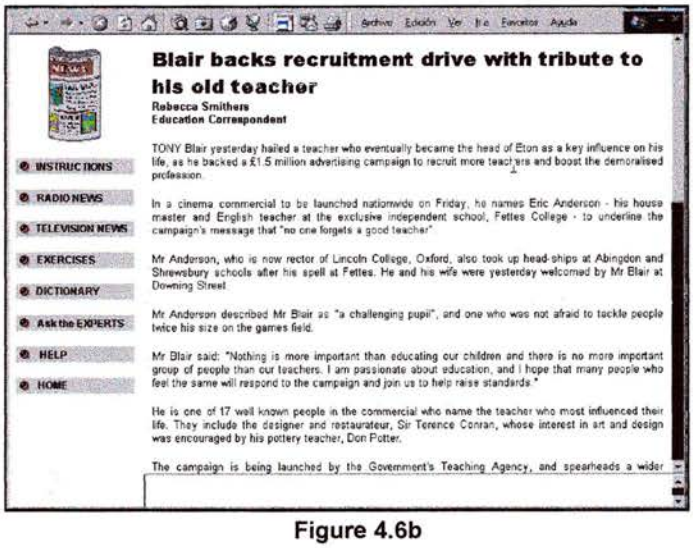


Figure 4.6b

After the two minutes have lapsed, the article disappears and a set of short instructions opens (figure 4.7: top area).

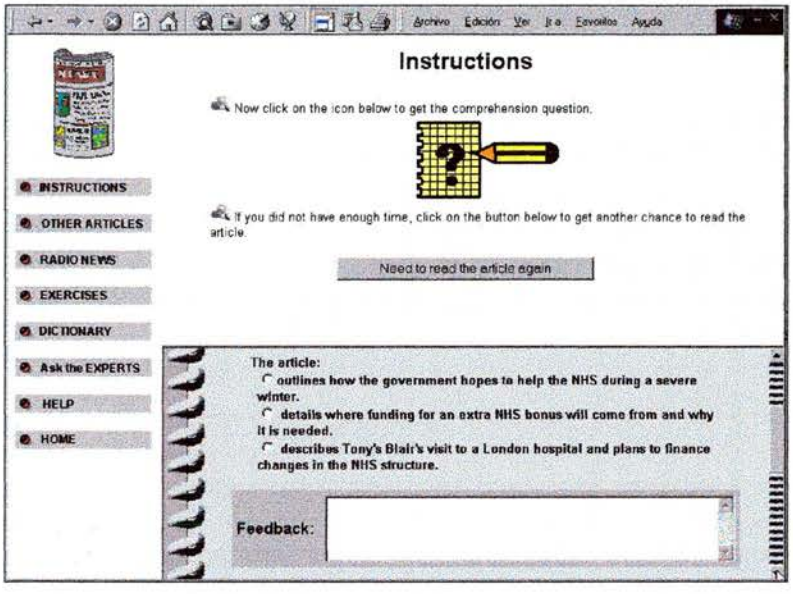


Figure 4.7

Learners have to decide whether they want to access the general comprehension question, which is a multiple-choice question (Figure 4.7: bottom area), or to have two more minutes to read the article by clicking on Need-to-read-the-article-again button. As teaching rather than testing is the focus of the program, no restriction is placed on the number of times they can have access to the text, but each occasion is only for the indicated time. Thus the pressure factor necessary to promote reading for gist is maintained. However, there is the danger that learners overuse this feature and then the point of the activity is obviously lost. Keeping a record of the numbers of times a learner accesses the text can provide useful information to identify the problems that cause difficulty. This repetition element is intended to avoid learners having a sense of failure in performing the task after the first try.

This feature also allows for individual differences in terms of different learners' ability in performing the task. Thus learners may choose to access the question (Figure 4.7) and answer first without having the text on screen and then if the answer is incorrect, they have the choice of accessing the text again for two more minutes (Figure 4.8a). Alternatively learners may choose not to answer the question at that point but read the text for two more minutes having the question on screen at the same time (figure 4.8b) so they can scan the text for the answer to the question. In

this sense, flexibility of options promotes individual differences in approaching the task. However, we should point out that different choices enhance different set of strategies and abilities, e.g. developing of memory skills if the first option is chosen.

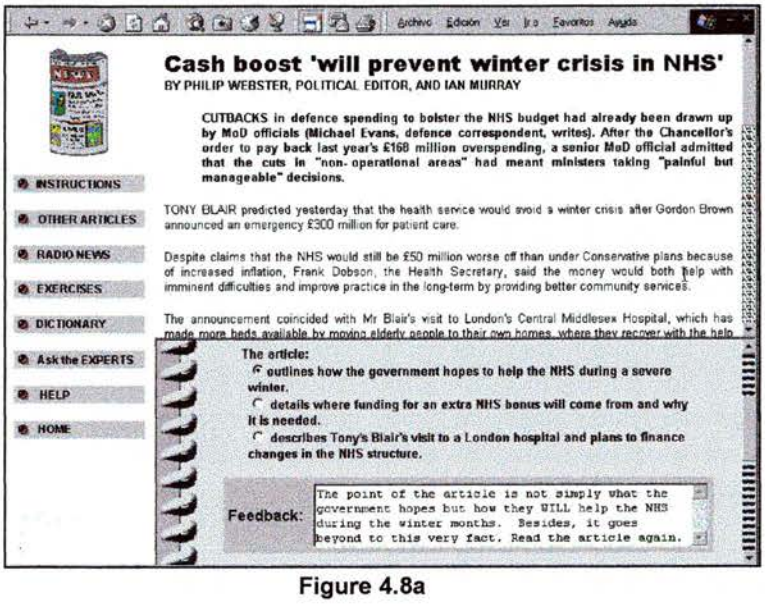


Figure 4.8a

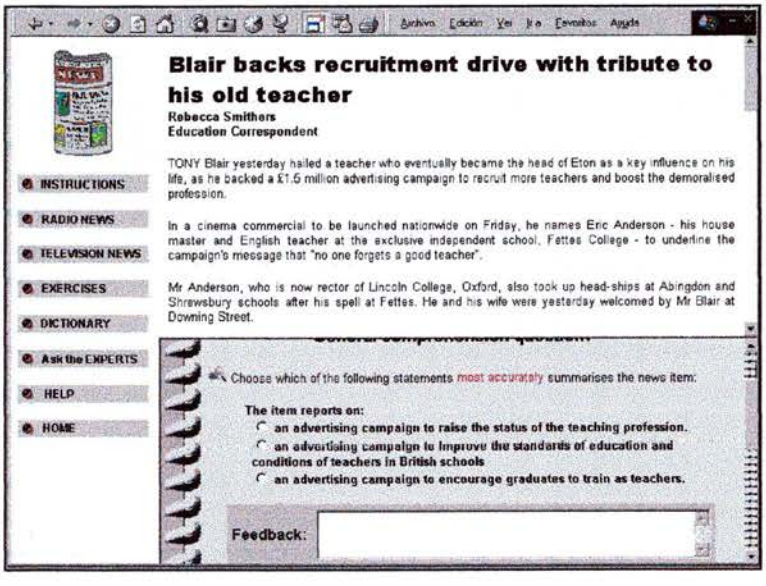


Figure 4.8b

The format of the general comprehension question is a multiple-choice question with three options (Figure 4.9). Each option is a statement which summarises the news item. Learners have to choose the statement that most accurately summarises the news item. Thus, incorrect statements are not sometimes necessarily entirely wrong, but inaccurate.

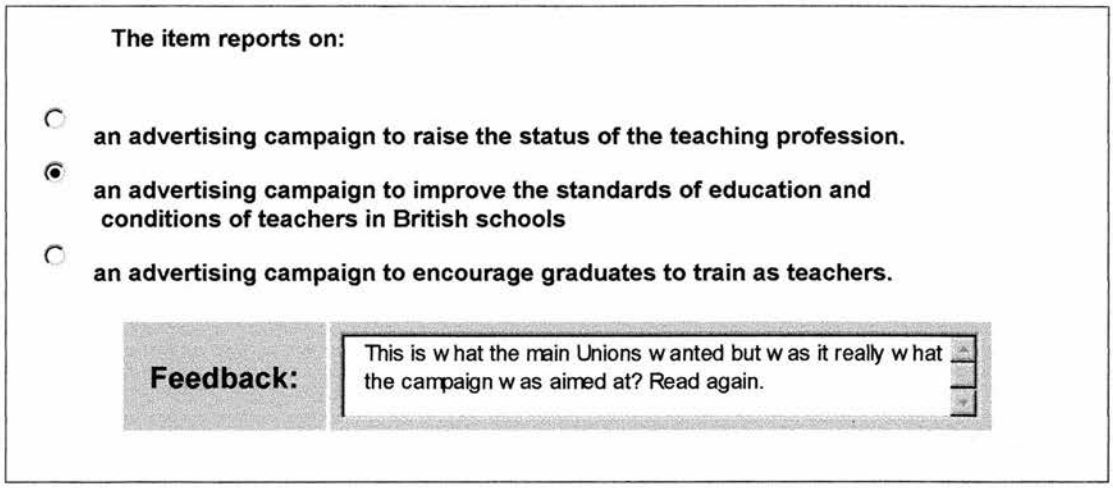


Figure 4.9

This activity is cognitively demanding at different levels. Firstly, learners need to comprehend the gist of the text in a limited time. Secondly, they must understand the exact meaning of the statements. Thirdly they need to draw some conclusions about the appropriateness of each statement in order to determine the most accurate one that summarises the essence of the news item. This is a clear example of a cognitively demanding task with simple presentation. That is another reason why the program never limits the learner but provides them with choices such as the ones mentioned above, e.g. to read the article again having the text at the same time as the question to contrast both and try to discriminate and select the appropriate answer.

Once learners have selected an option, they receive "immediate" feedback in a *textarea* below the question. Immediate feedback was chosen as the most appropriate technique for this sort of activity. Learners in that respect can quickly decide the next action after reading the feedback, either read the text again or immediately select another option if, for instance, they have doubts between two options. The feedback message is never the Wrong-Try-Again type and provides learners with the reason why the option chosen is not the appropriate one then tries to help learners to home in on the correct answer (see example above, Figure 4.9). Learners may select all the options until they manage to get the most accurate one. They are not penalised or awarded a score in any case.

Once the learner has finished with the general comprehension exercise, some instructions on how to approach the **second task** are presented. Before accessing the detailed comprehension exercise learners have to decide the following:

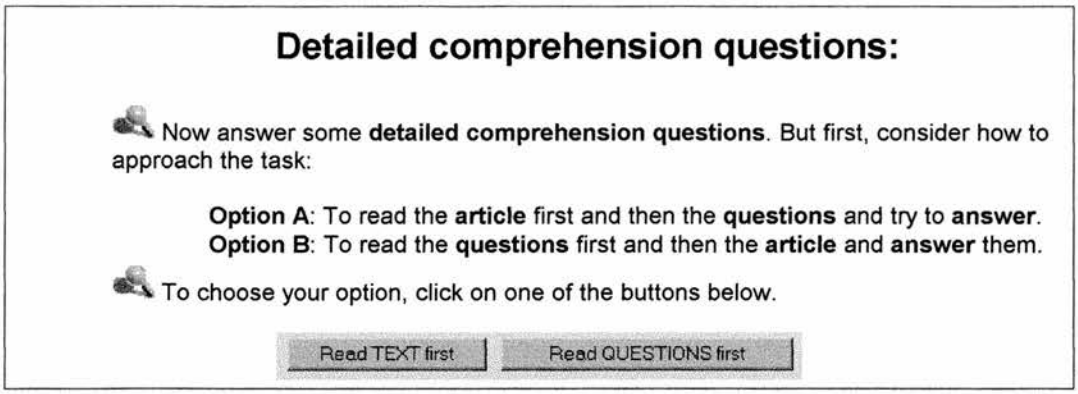


Figure 4.10

Allowing the learners to make this choice at this point serves several purposes:

- helps them think in their way of working, and consequently develops metacognitive strategies
- allows for individual differences and learning styles
- allows for individual needs according to how they performed the first task
- allows for experimentation on different ways of working
- puts responsibility on the learner
- hands control of the program to the learner
- increases the interactivity between the computer and the learner.

It is a choice that does not require a great cognitive effort on the part of the learners but allows them to choose their more suitable learning style, or alternatively the possibility for the conscious decision on selecting a different way of working for experimentation.

Regarding interactivity and control, in the first task learners are determined by the nature of the task to do what the program asks them to. Choice of the way to approach the task then is not viable. They have, though, the choice of answering the general question with or without having the text as described above (Figures 4.6 and 4.7). That choice then was not explicitly informed but by default, whereas here before starting the second task, the choice is on the contrary explicitly introduced.

In the design process careful consideration was taken to implement this feature of informed choice to the learner. This choice is presented every time there is a change of task, so learners can decide the way of approaching it. We should stress that either option is considered a valid one, that is to say, there is no penalisation in the score and feedback of the second task which could consequently determine the learners' way of working later on. Thus, their choice is entirely free and does not prompt any judgement.

Task 2, then, can be displayed having the text first on top of the screen and instructions at the bottom area (Figure 4.11a) or having questions first on the bottom of the screen and instructions on the top area. (Figure 11b). If the learners change their mind, they can have the missing component of the task by clicking on the corresponding icon.

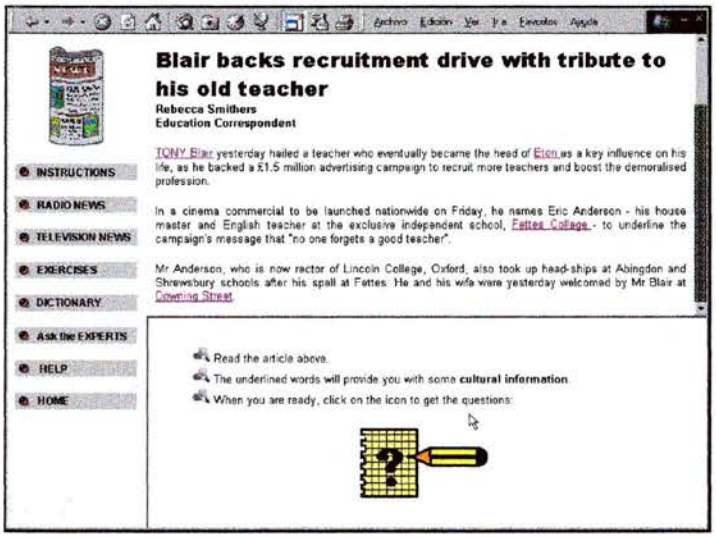


Figure 4.11a

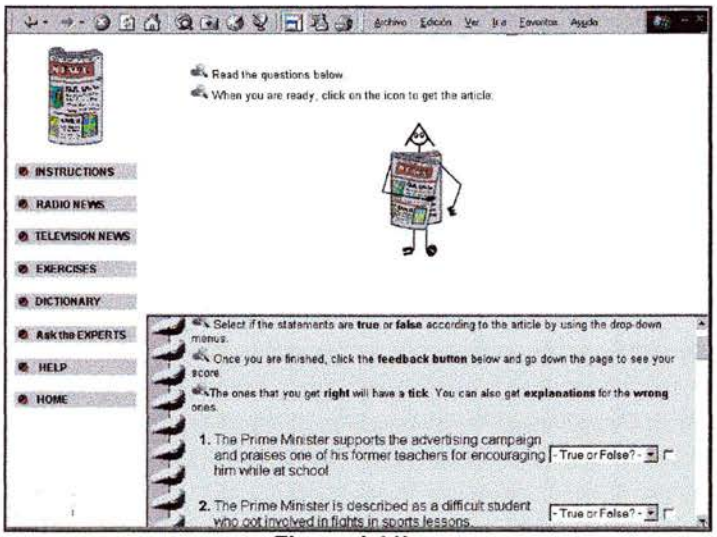


Figure 4.11b

In Figure 4.10a above we can appreciate that the text now has incorporated hypertext links in comparison to the same text in task 1 (see Figure 4.6a/b or 4.8a/b). These underlined and red-coloured words are hypertext links to some *Cultural Notes*. The reason behind incorporating these hypertext links on the text now is due to the fact that the learner starts a task where detailed comprehension is required. In task 1 the emphasis is only on understanding the general meaning of the text so the Cultural Notes are not strictly needed at that stage. Should we incorporate them in task 1, they will obviously distract from the task in hand. In section 4.6.2 below a more detailed description of the design of the Cultural Notes will be provided.

Regarding the detailed questions, the format used is the True-False type, but here another option is incorporated: *Don't know*. This third option allows the learner to recognise that after reading the text and the statement posed by the question they cannot come up with a suitable answer and therefore they will obtain direct feedback on that particular question. This option is incorporated to emphasize to learners that the exercise is not intended as a test but for learning. The nature of the True-False type implies that there is a 50% chance of answering correctly, so the luck factor should be taken into account. Including the *Don't know* option is an indirect way to make the student aware that this is not a test and if they are unsure they can select that option.

Detailed questions were carefully devised taking into account several aspects that directly determined the comprehension of a written text such as vocabulary, grammar structures or background information. These aspects, in that respect, also determine the way of giving feedback and help to preview learners' source of errors. The following table (4.4) exemplifies those aspects in the form of questions taken from different texts. We have included the explanations related to those questions so the reader can understand where the focus was placed in devising the question.

	Questions: Statements	Feedback: Explanations
Vocabulary: specific words	The debate to legalise the use of drugs was supported by the newly appointed drug 'tsar' yesterday.	The 'tsar' supported the debate on the use of drugs but legalisation was rejected.(Paragraph 1) The headline also describes this fact ' Tsar Hellawell RULES OUT legalisation of drugs'. RULE OUT='exclude', 'dismiss'.
Vocabulary: expressions	Mike Goodman suggests that refusing funding for education and treatment makes the drugs tsar's job impossible.	Goodman uses the expression: 'tying the hands of the drugs tsar behind his back', meaning that lack of funding will prevent him from acting in the way he wants to.
Grammatical structures	Adams hopes to be the last Prime Minister with jurisdiction in Ireland.	Adams hopes Tony Blair will be the last PM with jurisdiction in Northern Ireland. Please read carefully the first sentence of the third paragraph: 'Mr Adams told HIM that he hoped HE would be...'
Background or cultural information	The Health Secretary hopes to bring the health service and social services department closer together so that the money can be spent more appropriately	The metaphor that the article uses 'to break the BERLIN WALL between the health service and social services departments' implies to bring them together as happened with divided Germany after the Berlin Wall collapsed.

Table 4.4

We should point out that some of the above questions do not exclusively relate only to the aspect for which it is selected here, but as we can see in the table above they can also refer to other aspects at the same time.

Once the learner has finished doing the questions, s/he can proceed to click on the feedback button placed at the end of the questions. Below the feedback button an evaluation area is provided where the following information is now available:

- Number of correct answers
- Average of correct answers
- Time taken to answer the questions
- Evaluation message of encouragement or of seeking advice if the score was poor.

This information is mainly numerical which may mean little to the learner, which is why an evaluation message is included to make these numbers more meaningful. The reason for including this information is mainly motivational. Most learners want to have a quick evaluation of their success. "Observers have found that when scoring is present learners will go through the program to optimize their scores. The first goal is to win rather than to learn, but then they may go back through the program several times to experiment with alternatives" (Galagan, 1987:75). Thus following that principle the Reload Exercise button was introduced to allow students to make multiple attempts. On the basis of the feedback they receive in the Evaluation area, they may decide to go over the exercise again instead of seeing the Explanations.

The layout of the Exercise page allows for delayed feedback. To find out about the actual wrong answers the learner should go back to the Questions area on the same page and look at the boxes next to the answers. The ticked boxes mean that those answers are correct and the blank boxes indicate that the learner answered incorrectly (Figure 4.12). Questions which learners select as *Don't know* or are not answered are counted as incorrect and so the box stays blank.

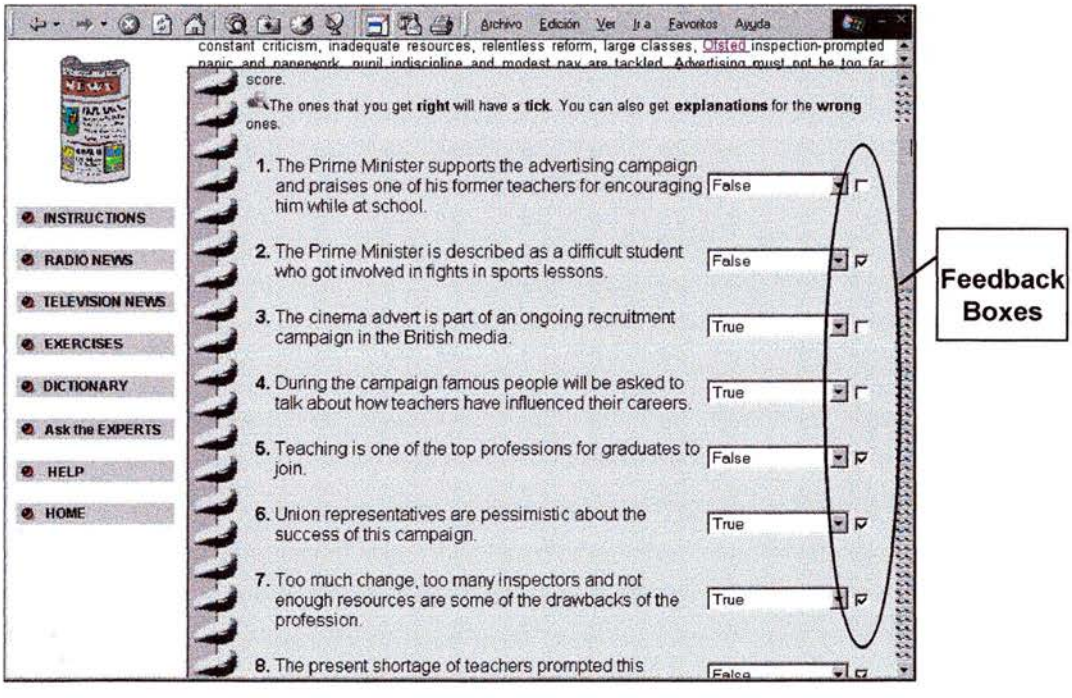


Figure 4.12

From here learners may decide to find out by themselves the source of errors by contrasting question, answer and text, or may scroll down to the Evaluation area and click on the Explanations-of-the-wrong-answers button (Figure 4.13). Explanations are not visible to learners until they specifically choose to click on the button.

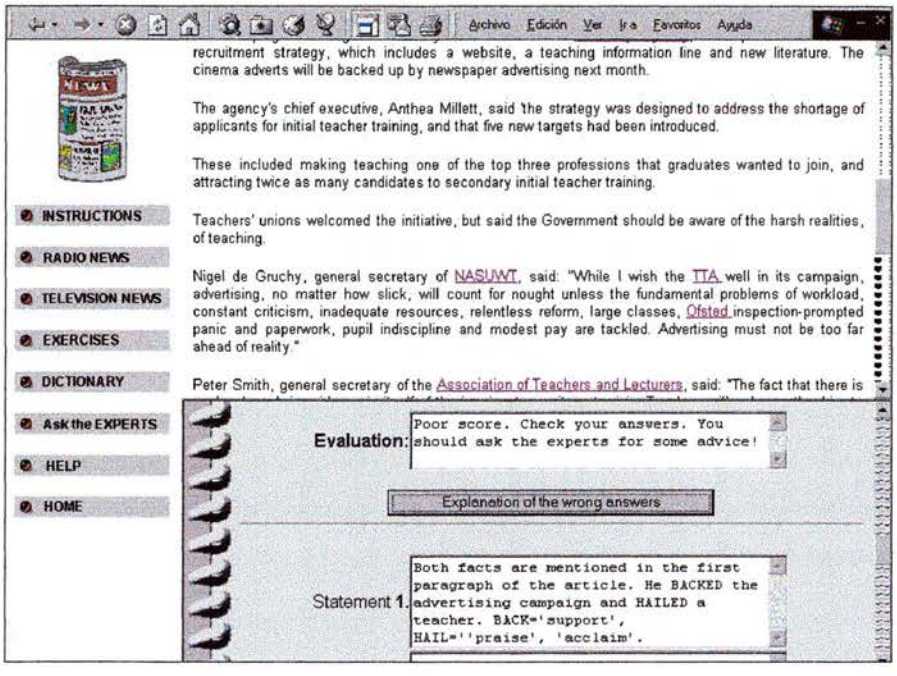


Figure 4.13

Here again we are handing responsibility to the learners to decide whether they want to discover their own errors first or to be given the explanations straight away by clicking on the button. Hence, we are adapting to different learners' styles: those learners who are more in line with discovery learning and others who prefer more explicit directions. These different approaches to dealing with feedback are not explicitly mentioned to the learner, but the way in which the handling of the feedback mechanics is designed prompts such decisions. In that respect, the layout of the Exercise page in three areas - questions, evaluation and explanation areas - prompts a hypothesis-testing approach since we allow learners to choose which type of feedback they want: delayed or immediate detailed feedback. If they choose not to obtain the explanations to the wrong answers straight away they can refine their hypothesis about their actual comprehension.

Explanations are placed at the bottom of the Exercise page since there was not much space on the bottom area of the screen for including them next to the question and the answer. The

bottom area would have looked too cluttered and difficult to read. However, we are aware that it would have been more comfortable for learners when comparing question, answer and explanation to have them together. As it is now designed, once learners have the explanations available they have to scroll the page up and down to compare these. Having explanations, questions and answers on the same page, though, allows learners to print everything together and take it with them for later revision or study.

Explanations are not provided for the correct answers since learners' attention may be dispersed and not focus on where they have a lack of comprehension. Explanations of the wrong answers have the following features (for examples see Figure 4.13 or Table 4.4 above):

- They are short, as experience tells us that long explanations are often not read.
- They are in English, in order not to interrupt the flow of hypothesis formation.
- They indicate the possible source of error either from lack of comprehension of the text or the question.
- If specific words are involved, these are capitalised and synonyms are provided. Latin-origin words are preferred for synonyms since the target learners are Spanish. If particular expressions are involved, these are also capitalised and explained in simple words.
- Location of word, expression or paragraph from the text to which the question refers is usually indicated.

So far we have described the Newspaper Module when learners access it from the main page. As we have mentioned above (*introduction of point 4.5*), the media modules are interconnected. Thus, learners can also access this module through other media: Radio or Television. The idea behind this is that learners now experience what we call **Second Encounter**. This is a reflection of what happens in real life. We read the paper and maybe later on in the day we listen to the same item on the radio or TV, or vice versa. **ImPRESSions**, therefore, allows learners to encounter the same news item on the other media. This feature is in line with the idea that the second time learners are more prepared, thematically or/and linguistically, to comprehend the new text. If that is the case - learners accessing this module from other media - learners then access directly the same news item as

they were working on in the other medium. Before accessing the related article, a set of instructions is displayed. (Figure 4.14)

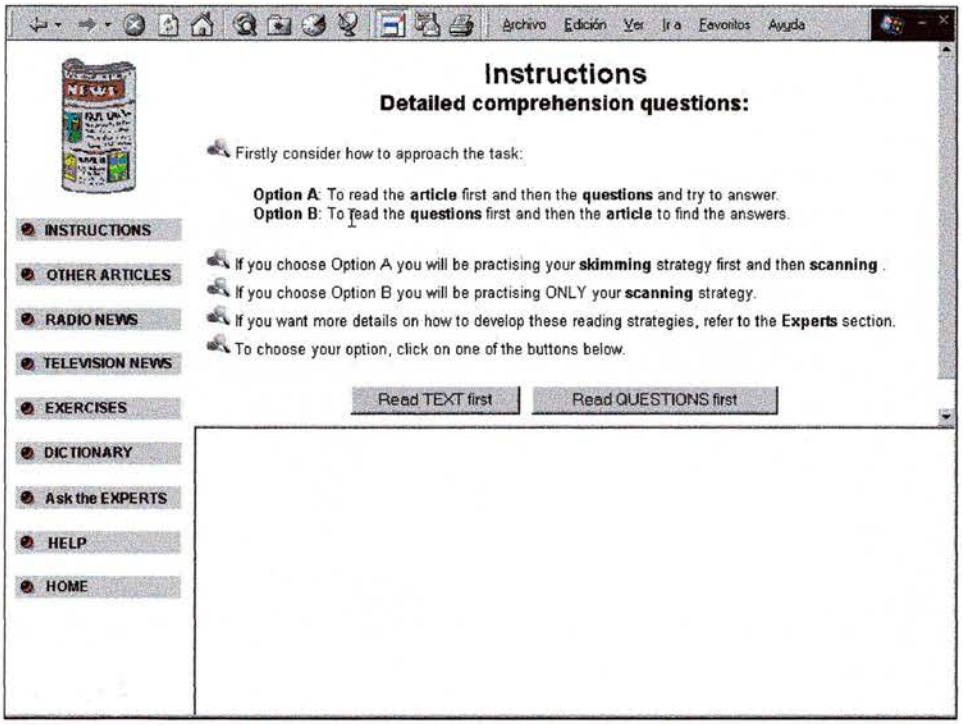


Figure 4.14

These instructions are, of course, different from the ones displayed when they are accessed as First Encounter. Learners here have to decide how to approach the task in a similar way as they do when they have to tackle the Detailed Comprehension Questions as described above. (Figure 4.10). The decision here has the same implications as above in terms of handing control to the learner and the developing of metacognitive strategies.

Once they have decided on the way of working, whether to read first the text or the questions, the task procedure is exactly the same as described for the Detailed Comprehension Questions above. Consistency of work helps to structure the learners' minds and ease their task. The task does not, obviously, involve general comprehension since they already know what the news is about, so the exercise is focused on detailed information. This time the detailed questions are aimed at the added information that the new text provides.

4.5.2 THE RADIO MODULE

The procedure and mechanics of this module are similar to the Newspaper module. Learners select the news item from a Contents page and enter the following page (Figure 4.15):

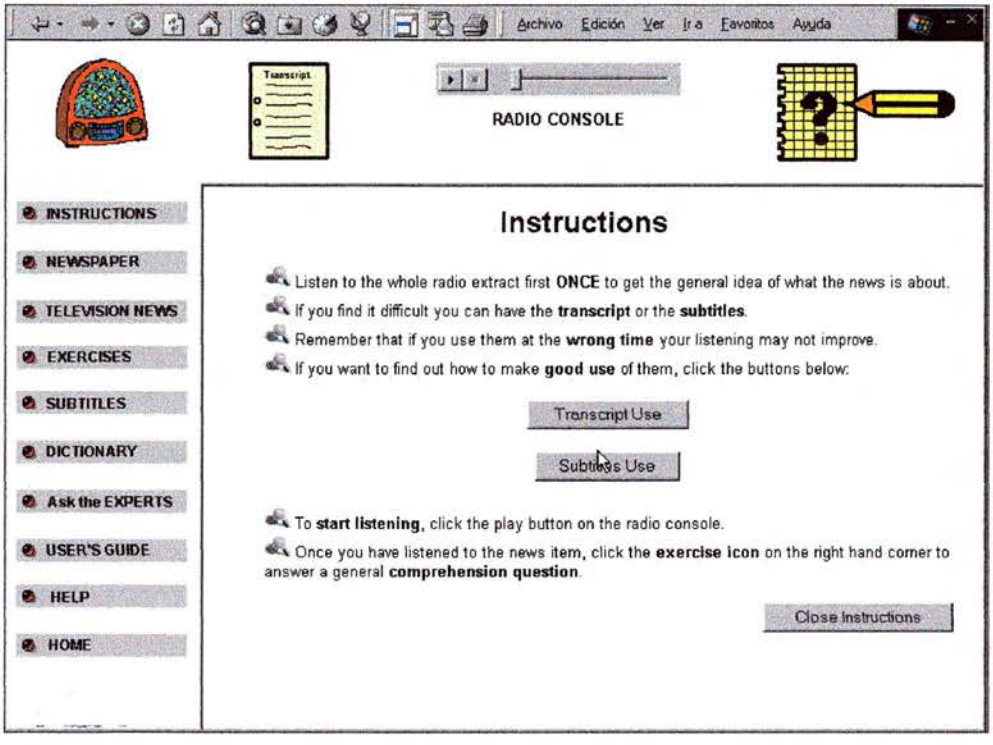


Figure 4.15

The layout of the screen is also similar but incorporating specific features particular to this module. The screen is also divided into three areas:

Left margin: buttons that provide access to

- Instructions
- Other articles of the same news item from different newspapers
- Same item of news but on other media: newspaper or TV
- Exercises
- Help facility: dictionary and subtitles
- Experts module: direct to listening comprehension (as we are in the Radio module)
- Help: description of this section of the program
- User's guide: description of the controls for the Radio console
- Navigational button and icon: back to the homepage or to the Radio contents page.

Top area:

- Transcript icon: clicking on this, transcript is displayed on the bottom area

- Radio console: including the following controls
  - *Play* plays continuous audio track of the news item
  - *Pause* pauses at any point and resumes play
  - *Stop* stops playing the audio clip and goes back to the beginning of the track
  - *Trackbar* fast forward or backward from any point of the track
  - *Display* shows total seconds of the track and the seconds remaining when playing. For technical reasons contrary to the design of program this control is not visible when the radio console downloads. Learners may access it if needed.

- Exercise icon: clicking on this, detailed questions are displayed on the bottom area

Bottom area: Instructions, Transcript, Subtitles and Exercise are displayed in this area of the screen.

The control buttons of the Radio Console were not designed specially but are the ones the Windows Media from Microsoft ™ provide. The program takes advantage of the software and applications the Windows operating system already provides.

The news items were recorded from BBC Radio 4 and later digitised. The listening tasks included are the same as for the reading comprehension tasks in the Newspaper module; i.e. listening for gist and then detailed listening comprehension.

At the start of the first task, instructions are visible in the bottom area illustrated in Figure 4.15 above. The instructions provided in this module "suggest" to learners one way they can approach the task in order to answer the general comprehension question. The instructions are not prescriptive and the design mechanisms in this area do not restrict the learner in any sense. Learners after reading the instructions may choose not to follow the suggestions provided and approach the task in a different way.

Some warnings and advice on the use of the transcript and subtitles is introduced in the instructions. Learners can also obtain more advice on how to make good use of these help facilities by clicking on the buttons provided in the instructions. The detailed description of these facilities will be discussed below in point 4.6.3.

The structure and procedure of the two exercises are the same as the ones described in the Newspaper module, with a general comprehension question and some detailed ones. In this way consistency of interface and navigation is maintained.

As in the Newspaper module, there is no restriction on the number of times learners read the article, so learners can replay the whole news item or any section of the track as many times as necessary to obtain better comprehension or to answers the questions. This freedom for multiple replay is based on enhancing learner differences and the learners' capacity to work at their own pace. This feature is one of the oft-cited advantages of using computers. Moreover, transactional listening comprehension is one of the most individual activities in language learning. In class, the pace and approach to the task is most often controlled by the tutor. The computer, however, allows for handing that control to the learner in an informed way. Learners can ask for replaying as many times as they need without feeling concerned about the feelings of the rest of the learners as regularly happens in classroom situations. Therefore, some affective issues are also resolved here. This replay and rewind feature is considered a Help facility since it assists the learner to get more accurate comprehension. However, it is not specifically designed for the program but is part of the mechanics of the Radio console.

In terms of differences from the Newspaper module we should also point out a slight difference in the design of the explanations of the detailed questions. The location of the possible source of error is described in a way that learners can easily locate them. Explanations identify either the person who mentions the point that the question refers to or describe the section of the track where the possible error may have occurred. Alternatively sometimes learners are directed to check the transcript for clear comprehension of the error. Messages such as *Listen to the beginning of the correspondent's report* or *Check the transcript, paragraph 4* help learners discover and locate possible sources of error. This feature prompts learners to listen again with or without the transcript in order to make them think about what happened when they listened to but did not catch that information. Informative feedback in this sense is impossible to predict since multiple factors may have occurred, i. e. not catching a word or words, misinterpreting the oral information, understanding the text but not relating it to the question, etc. Explanations only try to prompt learners to go through the same experience again with relevant information to discover the source of error or to become aware of what caused the error. As in the Newspaper Module, detailed questions were devised taking into account several aspects such as vocabulary, grammar structures or background information. (Table 4.4, above) These aspects are also the ones that the explanations of the detailed questions in the Radio module concentrate on.

4.5.3 THE TELEVISION MODULE

To maintain consistency, the Television module is similar to the Radio and Newspaper module. The differences lie in the screen layout and mechanics of some of the commands and buttons. The initial screen is divided into three areas:

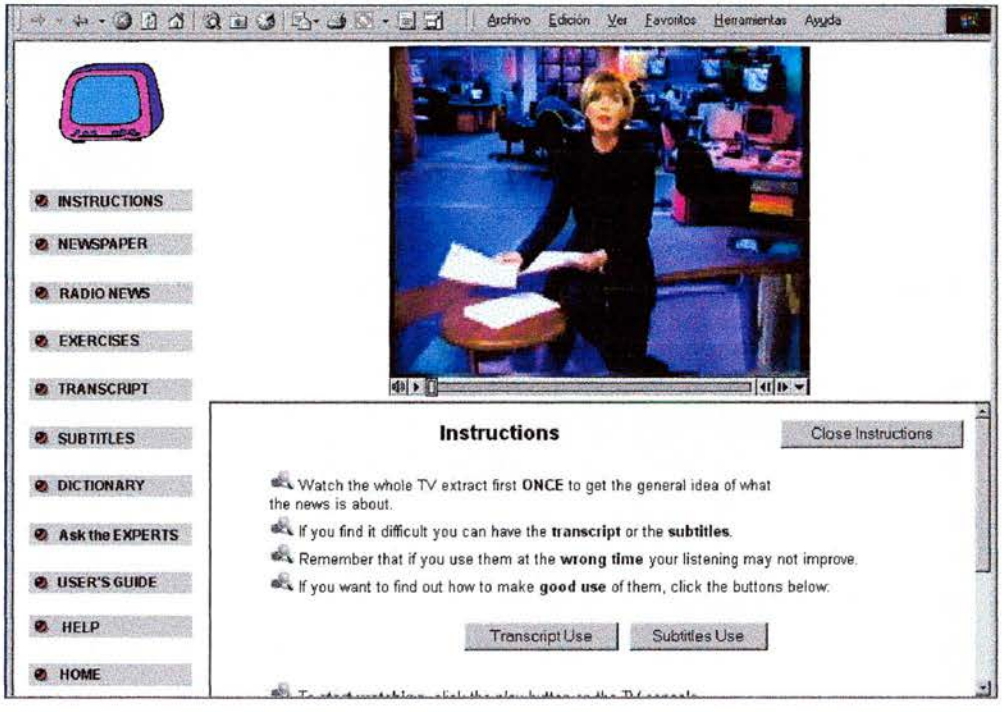


Figure 4.16

Left margin: buttons that provide access to

- Instructions
- Other articles of the same news item from different newspapers
- Same item of news but on other media: newspaper or Radio
- Exercises
- Help facility: dictionary , transcript and subtitles
- Experts module: direct to listening comprehension (as we are in the Television module)
- Help: description of this section of the program
- User's guide: description of the controls for the TV console
- Navigational button and icon: back to homepage or to Television contents page.

Top area:

- Video screen including the following controls:
  - *Play and pause* plays video item and pauses at any point and resumes play
  - *Stop* stops playing the video clip and goes back to the

	beginning of the track
○ *Trackbar*	fast forward or backward from any point of the track
○ *Position controls*	skip ahead or back frame by frame, alternatively pressing the button continuously fast forward or backward the video track

Bottom area: Instructions, Subtitles and Exercise are displayed in this area of the screen

The controls of the TV Console are the ones provided by the Windows Media of Microsoft ™ which the program uses for running the audio and the video within the browser: Internet Explorer.

The news items were recorded from the main news programs on the different British channels:

- BBC 1: Nine O'clock News (from October 2000, BBC1 News is at 10 o'clock)
- ITN: News at 10 (from 1999 replaced by two broadcasts, one at 6:30 and the other at 11:00)
- Channel 4: Channel 4 News
- Channel 5: 5 News

Regarding tasks where the news item is accessed as *First Encounter* or coming from another media, the procedure is the same as the Radio module. Questions were designed following the same aspects for comprehension mentioned in the Newspaper and Radio modules but also taking into account the visual aspect that the TV module incorporates. For instance, in an item of news some students and teachers are interviewed and the question was formulated as follows:

8. The male teacher interviewed says the advert will not encourage pupils to become teachers

Learners can watch who is who in the interview, including some graphics on the TV item which show the name and profession of the people interviewed on the screen, making it clearer to the viewer. Thus, some attention should be paid to the images in order to discern to whom we are referring in the question.

4.6 THE HELP FACILITIES

The help facilities are paramount in the design of **ImPRESSions** since they are the main target of the research study. From the list introduced in point 4.4, some of the facilities have already been described in point 4.5, such as Feedback, Instructions and the Replay/Rewind feature, as they are intrinsic elements of the tasks. The remaining help facilities are now described in turn: the dictionary, the cultural notes, the transcript and subtitles, and finally the Experts module.

4.6.1 THE DICTIONARIES

The dictionary facility can be accessed at all times within the three modules already introduced: Newspaper, Radio or Television. By clicking on the button displayed an independent window pops up as illustrated in Figure 4.17. This window can be moved and resized to the learners' liking:

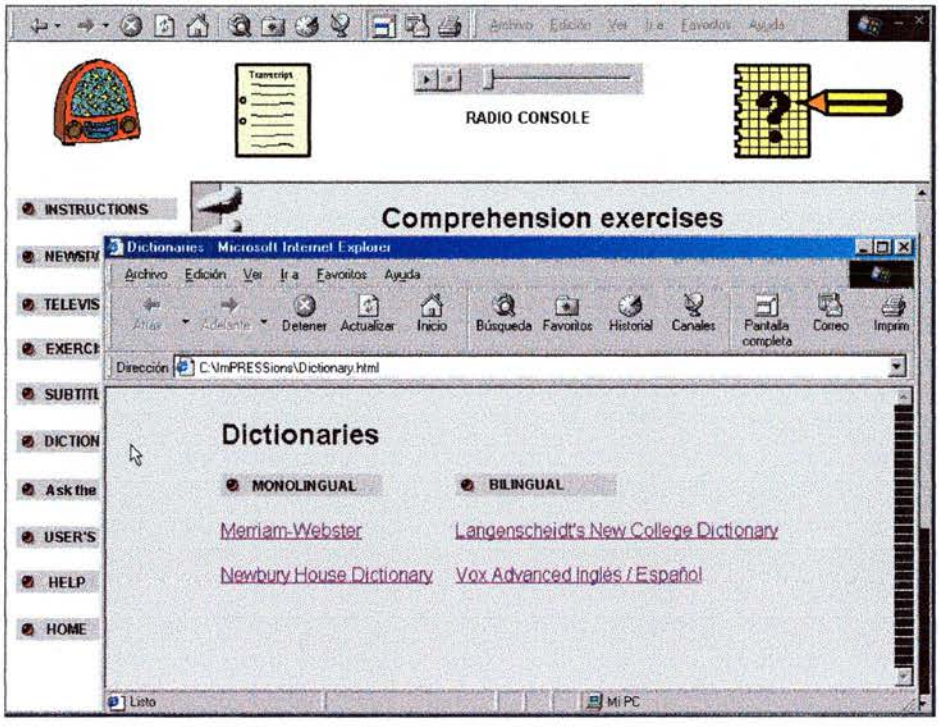


Figure 4.17

Access to four dictionaries available on the Internet is displayed, two monolingual and two bilingual: English-Spanish. The fact that our program is designed using Internet scripting languages allows for taking advantage of other resources already available on the Internet and with free access. Interactivity between those resources and **ImPRESSions** is easily implemented. The reason for using online dictionaries, therefore, was mainly cost-effectiveness but also provides us with the opportunity to research how learners use these new online resources and their usefulness.

Incorporating online dictionaries entails anticipating problems in terms of quality and accessibility. Access could be a real problem depending on the time of the day the learner is using

the program. We know that Internet connection could slow down at certain times as lines may be saturated or the computer mainframe that holds the dictionary may be busy with lots of requests. This could be a factor to take into account in our research study in that this can well be a reason for not using the dictionary at some points and make learners resort to inferring strategies instead. In this sense, we are indirectly promoting the use of learning strategies and we thought it was an aspect worth investigating. In any case, and to avoid learners' frustration, we provide two dictionaries under each category, monolingual or bilingual, so learners can access another one in case they cannot download the one selected first. Another aspect considered in terms of operational mechanics of the dictionary was that once one dictionary homepage was downloaded, learners could minimise the *Dictionary* window so they do not have to download the dictionary every time they want to look up a word. This makes access to definitions of words easier and faster. Alternatively learners can open another dictionary window from the original one and have two dictionaries running at the same time in different windows. Therefore, either way learners can have easy access to the dictionary at any time during a session of work and from any section they are at in the program. Access to the dictionary window is from the hidden taskbar at the bottom of screen (Figure 4.18) or by using the keyboard buttons: Alt +TAB.

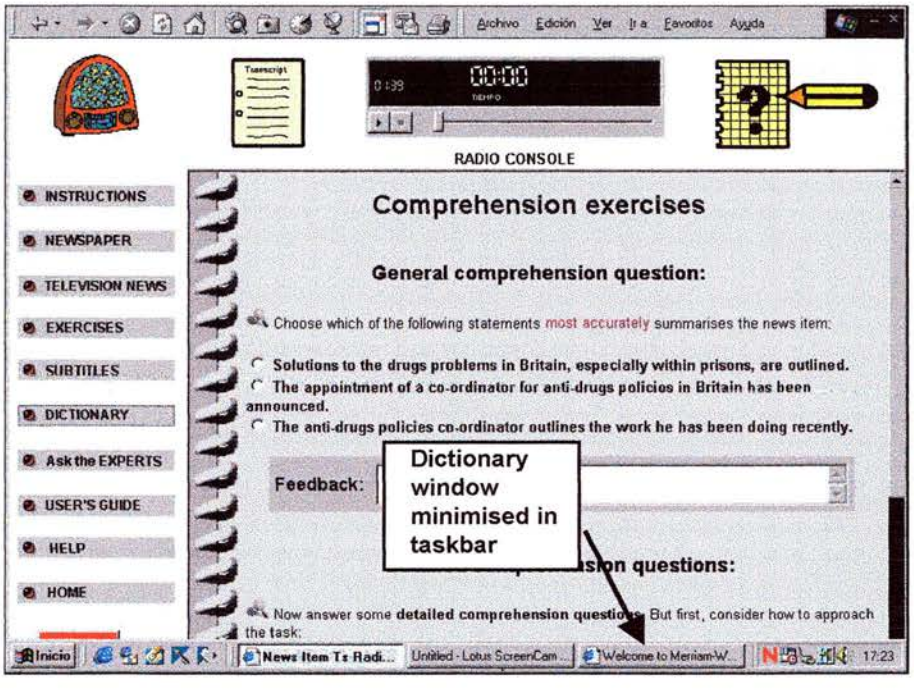


Figure 4.18

The quality of the dictionaries selected was evaluated in terms of number of words, layout, information included in the definitions, user-friendliness and ease of access. Some concern was

anticipated in that the two monolingual dictionaries are American and the texts were taken from the British media, thus differences of spelling could cause learners problems. Nevertheless there was no British dictionary with free access that had the same breadth and depth as the American ones at the moment of the research study. The dictionaries selected were the following:

Dictionaries	Number of entries	Definitions include	Other features	Publisher
WWWebster Dictionary	Based on ***Merriam-Webster's Collegiate® Dictionary, Tenth Edition:*** 215,000 definitions	Pronunciation (using typing characters) Grammatical Function: Etymology and Date Examples Synonyms: direct connection Derived words and inflected forms	Provides approximation of word search if not found. Includes direct access to Thesaurus.	Merriam-Webster, Incorporated. USA
Newbury House Online Dictionary	40,000 entries	Pronunciation (using IPA symbols in graphic form) Grammatical Function Examples Synonyms: direct connection Derived words and inflected forms	Provides approximation of word search if not found. Includes button to Related Photographs.	Monroe Allen Publishers, Inc. Heinle & Heinle USA
Langenscheidt's Dictionary	125,000 references	Grammatical Function Examples Derived words and inflected forms (No Pronunciation)	Output of each entry was limited to only 2048 characters so sometimes entries were not displayed fully	Lemout & Hauspie Speech Products N. V. Germany
VOX: English-Spanish	118,902 references	Grammatical Function Superheadwords in English for different contexts of word Usage information Examples Derived words and inflected forms (No Pronunciation)	Allows for different modes of searching: The word – • Begins with • Ends with • Contains • Is	Grupo ANAYA Spain

Table 4.5

Most programs that display definitions from highlighted words on text in hypertext format provide only L1 definitions or L2 translations but rarely allow the option for choice. One exception is described in Laufer *et al.* (2000). As this hypertext feature is not included in **ImPRESSions** as discussed in point 4.4 above, we could easily incorporate the choice between monolingual or bilingual dictionary. Having this option we are taking into account learners' differences and styles since learners can select the dictionary they feel most comfortable with, and allowing for experimentation as they have the option at hand to use a different type from the one they are used to in real life.

The four dictionaries follow a similar procedure in terms of searching for words. Learners type the word in a textarea (Figure 4.19a), click on the search button and after a few seconds the definition downloads (Figure 4.19b).

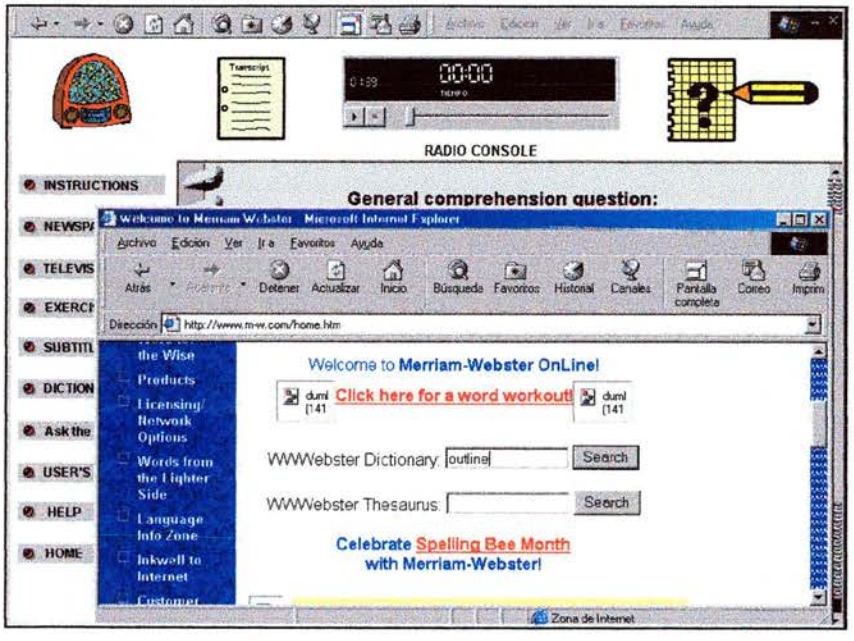


Figure 4.19a

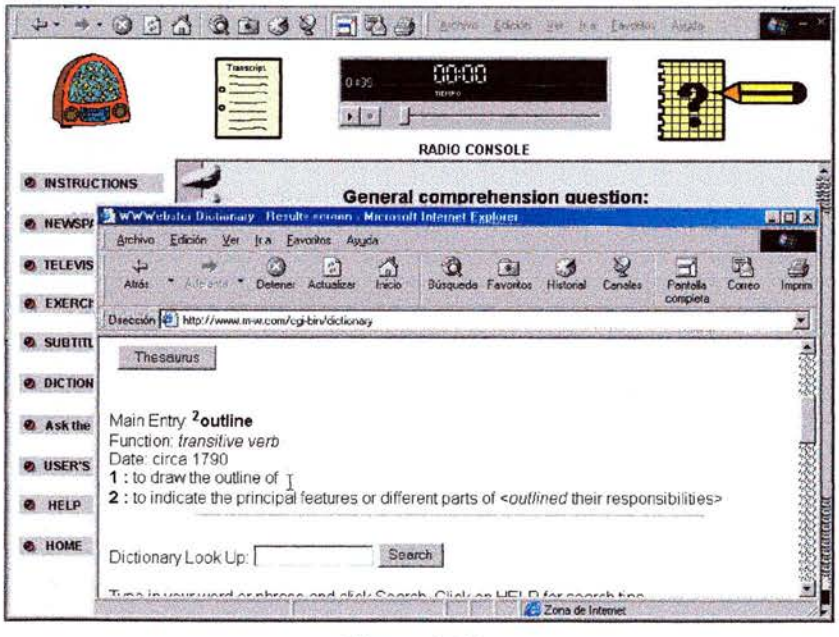


Figure 4.19b

4.6.2 THE CULTURAL NOTES

Cultural notes are included in the written texts of the news items, both the newspaper article and the radio and TV transcripts. In the article and the radio transcript, the Cultural note is displayed on the left margin when the learner places the mouse over one of the links (Figure 4.20a). The Cultural notes disappear when the mouse is placed off the link and the left-margin buttons are displayed again. In the TV transcript, as it opens in an independent window, the Cultural notes are displayed on the left margin within the transcript window. (Figure 4.20b).

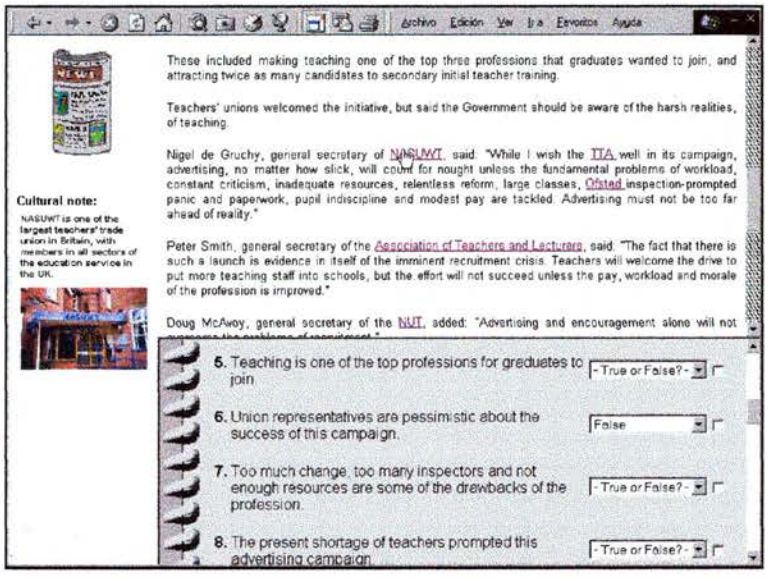


Figure 4.20a

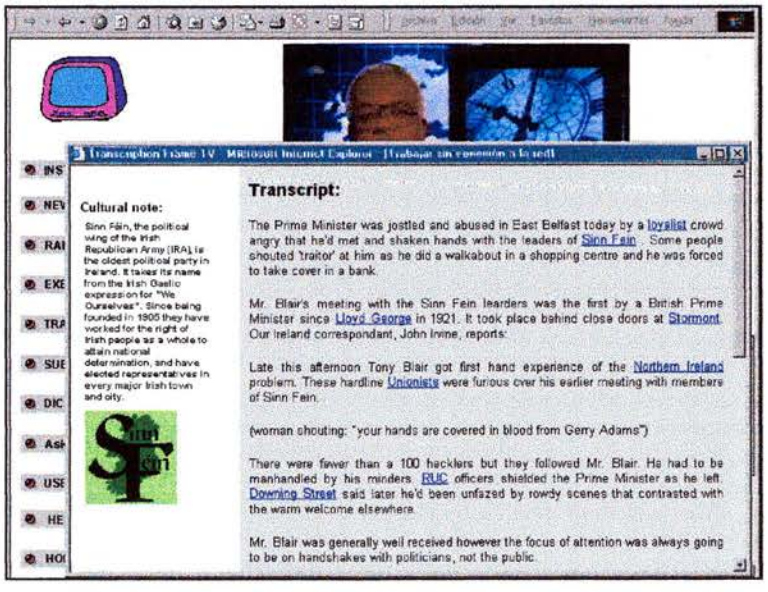


Figure 4.20b

The main features of the Cultural notes are:

- Ease of access: learners only have to place the mouse over the link - clicking is not necessary. This feature tries to assist learners' comprehension in the least disruptive way possible.

- Free access: learners may or may not choose to consult a note.

- To provide information that learners are presumed to lack in terms of socio-cultural information which is directly or indirectly related to better comprehension of the text, and which could be difficult to find in the dictionaries provided. Links include names of people and places, abbreviations and acronyms of organisations and other relevant culture-specific concepts.

- Cultural notes differ in length depending on the aspect they describe. Some extend their information beyond the actual need for comprehending the text, others simply provide the precise information to solve learners' background knowledge limitations.

- Most cultural notes include a graphic element, either a photo or a drawing, in order to attract learners' attention to the note (Figures 4.20a/b) and to provide a visual element which may assist some learners to associate the concept with the image. In some notes, the graphic element separates the text in two parts but is usually placed at the top or bottom of the Cultural note.

In the texts used for the research study, we specifically introduced some aspects in order to investigate which Cultural notes learners consult, which they don't consult or consult less and which they could need information but the cultural note is not present. Thus, some links

- refer to well-known people or places: Tony Blair, Belfast
- refer to less well-known people or places (from the foreign learner perspective): Martin McGuiness, Stormont, Whitehall
- refer to acronyms: NHS, NASUWT
- refer to non-culture-specific points: soft drugs.

- are already explained in the text itself: Release, the drugs legal and advice group,
- are self-explanatory: Association of Teachers and Lecturers
- are missing but somehow relevant to text comprehension: drugs tsar

In the same line, consultation of relevant Cultural notes will closely depend on their relevance for the task, thus some questions refer directly to some Cultural notes. This fact could prompt learners to consult them: the concept of *Tory* introduced in one question is explained in the Cultural note Conservative, thus if learners do not know Tory they may lack information for answering the question. Alternatively some questions refer to some people who have a Cultural note in the text but consulting these may not assist in answering the question correctly: *3. The first meeting between Lloyd George and Michael Collins was conducted in a civilised manner.* The notes on Lloyd George and Michael Collins do not provide that information but the fact they are mentioned in the question may prompt learners to consult them.

4.6.3 THE TRANSCRIPT AND SUBTITLES

The transcripts and subtitles are help facilities that assist learners in overcoming decoding problems or with their limitations in auditory perception. Although both facilities have the same purpose, and thus it could be more cost-effective to include only one, they are both incorporated in the program in keeping with the principles of individual differences.

In the design process, however, some concern was raised about the implementation of the subtitles. Learners are not to be trained in simultaneous listening and reading of news. This skill is only used in real life when watching foreign movies, hence there is no reason to include it here. Besides, the benefits of using subtitles are still unclear (Jakobsdóttir *et al.* 1995) so initially only transcripts were envisaged to assist learners. However, the use of subtitles could add insights into the benefits learners perceive in using them in comparison to using the transcript, apart from observing, of course, the cognitive processes involved in the use of this facility.

The misuse of these facilities can prevent the development of listening strategies and thus prompt the contrary effect to that intended. Careful consideration was given to the design of these facilities. To start with, emphasis was placed on introducing a *Guidance* element in order to draw learners' attention to that fact. This is implemented in the instructions of the Radio and TV module before learners start their listening task. Learners can consult further information by

clicking on a button for each facility which opens an external window with suggestions for appropriate use of these facilities as illustrated in Figure 4.21. Different procedures are suggested providing the purpose for each step of the procedure. Including several suggestions underlines the non-prescriptive nature of the advice provided and keeps in line with catering for individual differences.

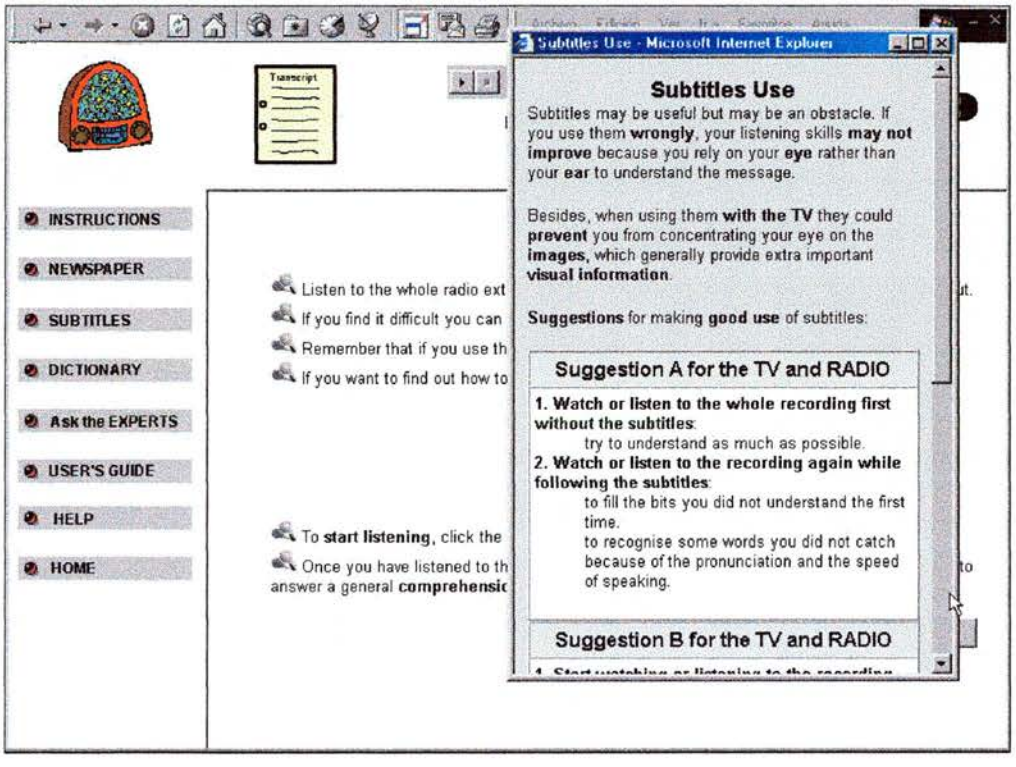


Figure 4.21

The layout of this information is included in a very schematic way, e.g. tables, numbered points, short sentences and highlighted words, trying to make it user-friendlier and not heavy-going to read.

The second aspect to be considered was the access to those facilities. With regard to the transcript, in the Radio module it is displayed in the bottom area of the screen where the questions are also displayed (Figure 4.22), so learners cannot have the questions and transcript at the same time. This feature avoids the temptation of having the questions and the transcript at the same time and thus practise reading instead of listening strategies when the latter are the ones intended to be practised.

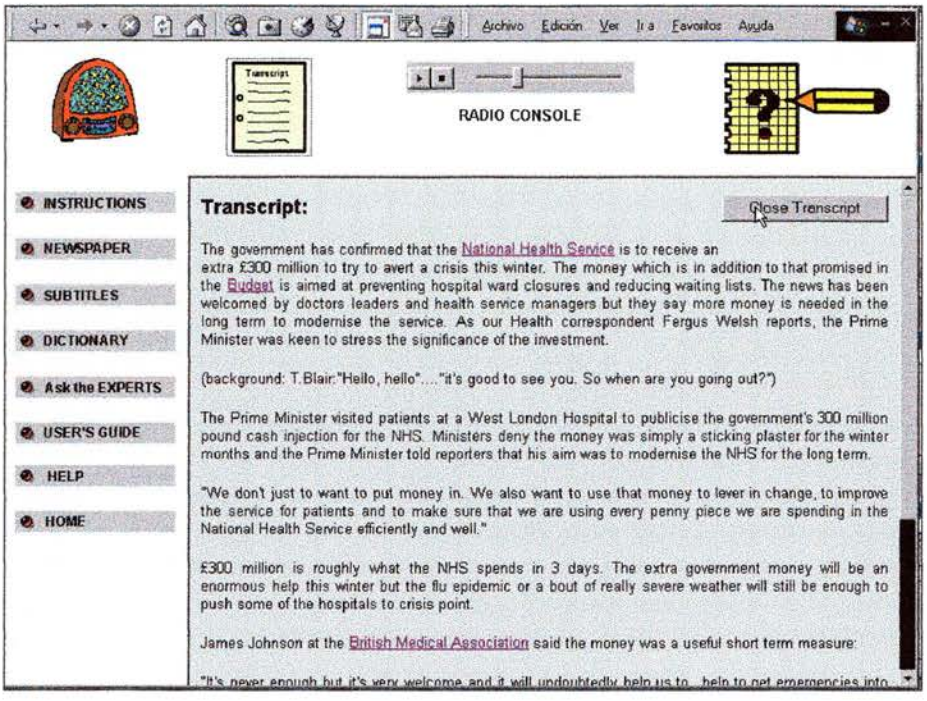


Figure 4.22

If learners wish to check the transcript while doing questions, they have to go back and forwards making it clumsy and operationally more difficult. Apart from this, learners have no restriction in consulting the transcript, i.e. before, after or while listening.

In the Television module the transcript, however, is not included in the bottom area but in an independent window (Figure 4 20b, above) . The fact that the transcript includes Cultural Notes on its margin makes it impossible for it to be displayed in the bottom area since there is not enough space to make the Cultural note readable. The transcript is displayed on a separate window instead which can be moved and resized accordingly to avoid covering any part of the screen. The transcript can then be read when learners have the questions displayed. However, learners are forced to close the transcript window if they want to perform any action on the questions area, e.g. scroll questions down or try to answer a question. With this restriction we try to avoid that undesirable access to the transcript when learners are actually answering listening comprehension questions. In any case, learners have no restriction on the number of times that they can access it and at what point in the task.

This problem does not arise with the display of the subtitles which in the case of both, Radio and Television, is in the bottom area of the screen. (Figure 23a and 23b)

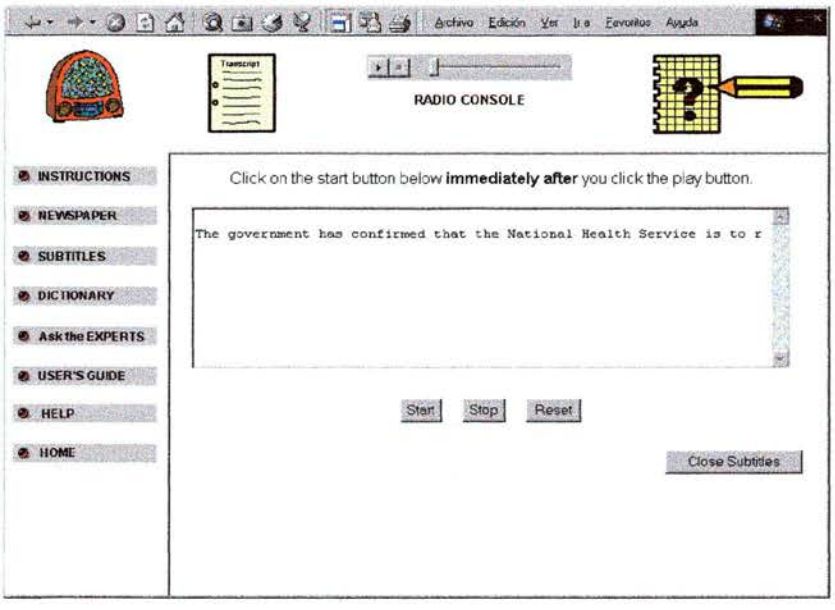


Figure 4.23a

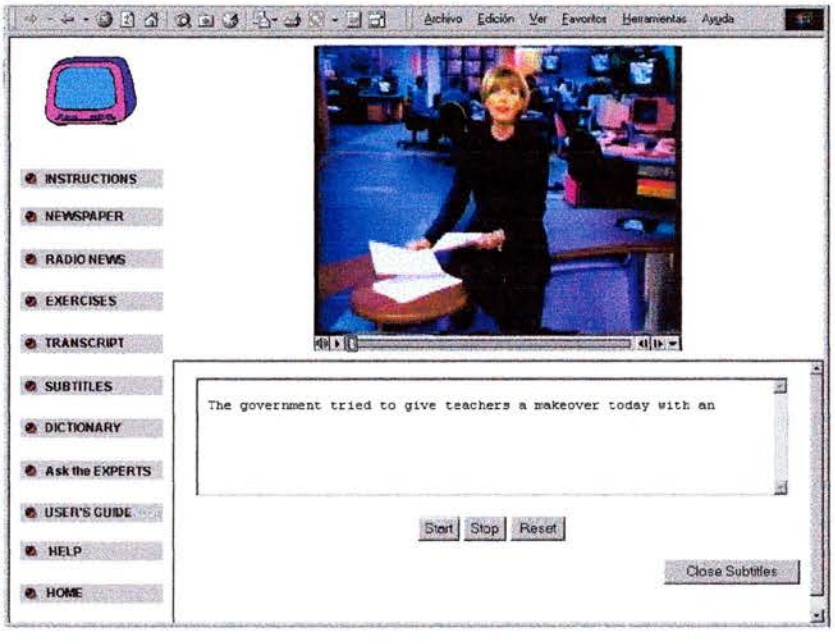


Figure 4.23b

The subtitles are not automatically synchronised with the images. Learners have to click on a Start button immediately after they have clicked on the Play button. Subtitles then start to show as if someone was typing the audio track. It really depends on the user to obtain adequate synchronisation. If learners want to, for instance, stop the track, they have to stop the subtitles, but then it implies losing the achieved synchronisation. Sometimes the subtitles go faster than the

actual audio or video, in that case learners can alternate clicking on the Start and Stop buttons to synchronise both. If learners are completely lost and synchronisation is not possible, a Reset button is provided to start from the beginning. Consequently, the most effective option for using subtitles is to listen to or watch the news item from beginning to end. These technical difficulties are due to technical issues since the subtitles used a webpage enhancement oft-called "scrolling marquee" which was not intended for the use we applied it to in the program. However, it was the simplest, cheapest and most effective way to implement the subtitles help facility in a Web environment. The speed of scrolling is dependent on the speed capabilities of the computer, therefore the coding of the subtitles should be adapted to the actual computer. This was implemented for the specific computer that was used for the research study.

In terms of interactivity, we are asking the learner to take control of this feature instead of the computer, but we are not overloading the learner with a demanding task. Hence, we can observe how learners handle the problem of synchronisation: Do they notice it? Do they bother? Do they follow? Do they manage to obtain the desired synchronisation? At the same time, we are indirectly encouraging them to exercise their auditory perception and raise their awareness of the relation between sound and the written form.

The transcript and subtitles are also help facilities connected to Feedback since they allow learners to discover their errors. After the comprehension exercises Explanations in the Feedback prompt learners to use the transcript to become aware of the possible source of error. After the listening task is finished learners can observe in more detail the formal and functional features of the language introduced in that particular text.

4.6.4 THE EXPERTS MODULE

The Experts module is probably the most explicit learner training element of the program. It provides information on strategies involved in listening and reading and advice on how to improve those skills. The main purpose of the module is to develop learners' metacognitive knowledge regarding strategies for comprehension.

The format of this information was carefully planned in the design process. The first decision was to take advantage of the multimedia capabilities of the computer and thus the video format was thought to be ideal for that purpose. Experience tells us that most learners pay more attention

to tutors' advice in class rather than reading it from handouts or textbooks. Hence, the video feature adds a human aspect to the computer-learner interaction and enhances affective and motivational aspects. The result is that learners can watch a tutor responding to a question posed by them.

Interactivity however is limited as the learner is restricted in the choice of questions to ask. Questions obviously had to be designed in advance. This fact posed the problem of deciding which ones to include. For that reason, a survey was conducted to find out which ones were the preferred questions among learners of English (see Appendix E, Questionnaire 2: learners, question 2). We must add that the questionnaire only referred to reading comprehension. For the listening comprehension section, questions were devised without previous consultation with learners and an informal survey was conducted among English teachers to see if those selected were the ones learners are usually more interested in. Questions were discarded or added accordingly. The final result of these surveys is that the following 8 questions were finally implemented for each section:

Reading Comprehension
1. What can I do when I do not know a word? 2. How can I guess the meaning of a word? 3. When can I use skimming? 4. How can I improve skimming? 5. When can I use scanning? 6. How can I improve scanning? 7. What can I do when unfamiliar information is given? 8. How can I improve my reading?
Listening Comprehension
1. What can I do when I do not catch a word? 2. What can I do when I do not understand a word? 3. What can I do when I comprehend less than 50%? 4. What can I do when I cannot follow the speed of the speaker? 5. What can I do when the speaker has a strong or unfamiliar accent? 6. What can I do when I hear too much unfamiliar information? 7. How can I improve listening to the news on the radio? 8. How can I improve listening to the news on television?

Table 4.6 Experts' questions

The second crucial decision to be made in the design phase was to decide the content of the answers and the number of Experts to include. Both issues were solved in the following way. The content of the answers was not to be decided and pre-scripted by the designer of the program but by the Experts themselves in order to add some authenticity to their responses. The tutors selected can communicate their own ideas and perspectives so we are not corseting their opinions. It was also thought that more than two teachers could cause confusion for the learners since they could have multiple and so varied opinions that could be counterproductive in the end. Besides, we wanted to introduce the video element which technically and in terms of interface design would have been more difficult to implement.

The issue was then to find the appropriate Experts who wanted to collaborate with the project. Two experienced English teachers and teacher trainers from the Institute for Applied Language Studies at the University of Edinburgh, Mrs Sheena Davies and Dr. Tony Lynch accepted the proposal. Their answers to the above questions were video recorded and later digitised to include them in the program. Both teachers had the questions in advance to structure and prepare them but they were asked not to read any pre-written scripts to keep their responses as natural and spontaneous as possible. Moreover, they did not know each other's answers so we could increase the authenticity of their response. Thus in the end product some answers deal with the same points, which adds a reinforcement aspect that learners usually need, and some are approached from different perspectives, which improves the variety of strategies introduced (for examples refer to Appendix, B – Experts: questions and answers). In any case, all answers for the same questions are complementary since they come from the same pedagogical background, the communicative approach. The choice of two tutors also emphasises authenticity since in real life learners, in their learning process, encounter several teachers with different approaches and ideas. Some emphasise one aspect over the other but all help learners in their language development. Individual differences are promoted in **ImPRESSions**, not only from the learner's point of view but also the teacher's. It should be said that the program does not intend to be prescriptive in the area of strategy training but rather make learners aware of different possibilities. As designers we should not favour some styles and strategies more than others but provide a wide range of possibilities to accommodate as many individual preferences as possible.

The Experts module can be accessed from the main page or from the other three modules by clicking on the *ASK-THE-EXPERTS* button located on the left margin (as seen in Figure 4.5, 4.15 & 4.16). In this way, learners have the choice of either starting a session by consulting the

Experts or doing so whenever they feel appropriate within the other modules. If the learner starts a session clicking on the Experts icon of the initial screen (Figure 4.2 above) , the following screen is displayed:

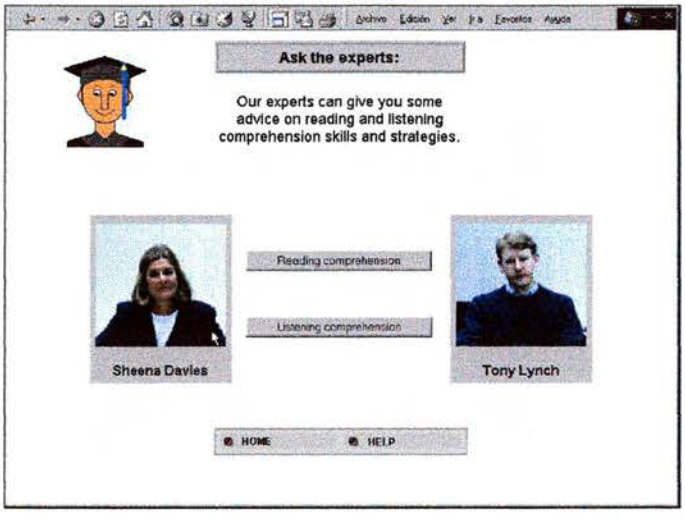


Figure 4.24

From this screen learners have the choice of obtaining advice on reading or listening comprehension strategies according to what they want to concentrate on. If, on the other hand, learners access the Experts module from the other three modules, then they enter directly to the skill section involved in the module they are working on at that moment. That is to say, if learners access the Experts from the Newspaper module they access directly the reading comprehension section, whereas if they access it through the Radio or the TV modules, the listening comprehension section opens. In either way the following screen is displayed:

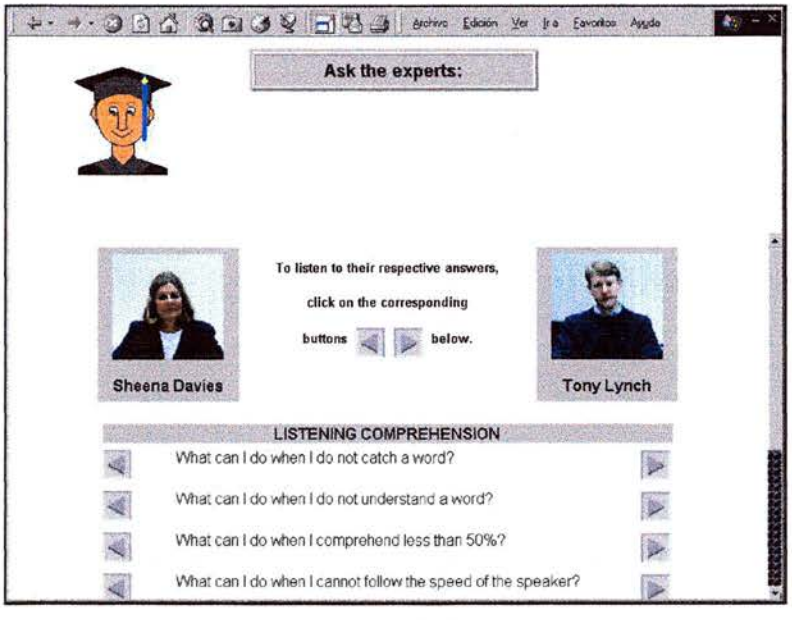


Figure 4.25

The layout of the screen is the same for both reading and listening strategies sections:

- **Top area**: Icon and title
- **Bottom area**: photos of the Expert and the 8 questions

Learners can choose to listen to the answers of one or/and the other by clicking on the arrow buttons placed at either side of the question and below the Experts' photos. Answers are displayed one at a time in the following way (Figure 4.26a or 4.26b):

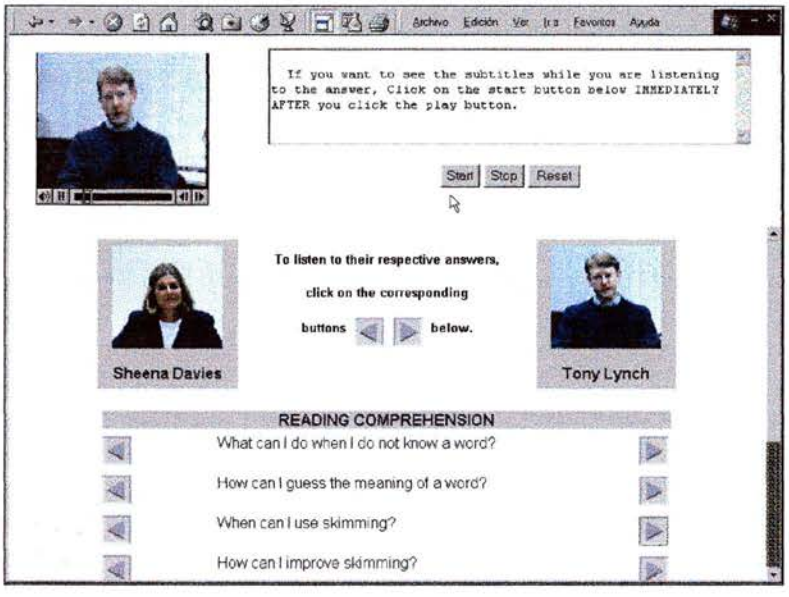


Figure 4.26a

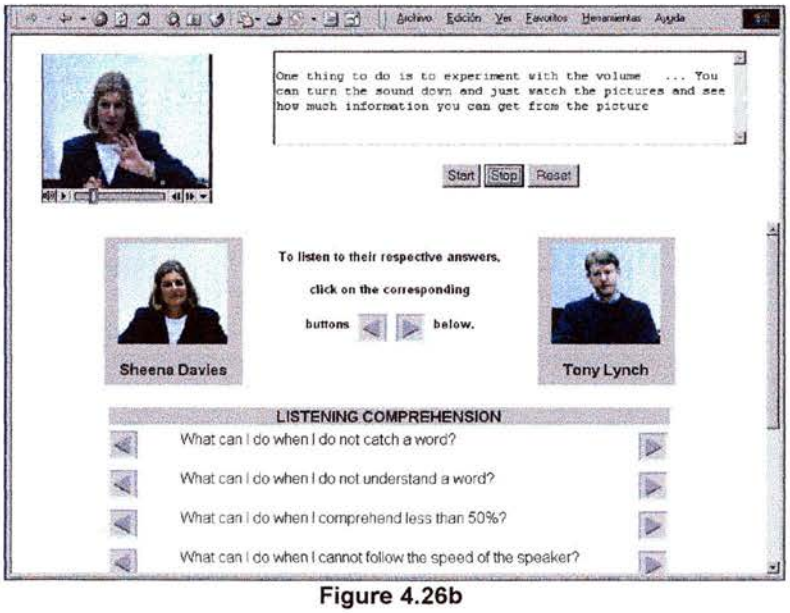


Figure 4.26b

Once the learner has clicked one of the buttons of a particular question, the top area of the screen is transformed: a video screen and console, and a subtitles textarea are incorporated on to the top area of the screen (Figure 4.25a). On the video screen the tutor selected appears and learners can watch and listen to his/her answer. Alternatively learners have the option of following their answers using the subtitles facility provided (Figure 4.25b), which operates in the same way as described in 4.6.3 above. This help facility is directly displayed in this section at the same time when the video screen downloads in order to be as supportive as possible. Learners may misunderstand, misinterpret or not catch the information provided by the Experts. Then the purpose of the Experts module would not be achieved. In that case they may also choose to read the subtitles instead of watching the Experts if they wish. The programme caters for learners' preferred choice of media, to listen to or to read about reading and listening comprehension strategies information. The main concern here is that learners catch and understand the information provided.

Once learners finish working on this section, they can access the initial page of the program by clicking on the HOME button provided at the bottom of the questions and start a reading or listening comprehension session. If coming from another module, they can use the back button provided by the browser on the menu bar and then return to the news item they were at when they accessed the Experts module, and keep on working. And if learners use this module at the end of a working session they can obviously close down the browser and end the session.

4.7 SUMMARY

As illustrated in detail above, all features of **ImPRESSions** have been deliberately designed or planned to allow learners to make best use of the material provided and to accommodate research on the use of help facilities. The design of the program is underpinned by theoretical understanding of how best to facilitate foreign language learning drawn from the literature (Chapters 1 , 2 and 3). On these grounds, taking the model of the AAA curricular framework proposed by Leo van Lier (1996) (see point 2.4 in Chapter 2) we can justify the design features adopted within these theoretical assumptions as follows:

THEORETICAL PRINCIPLE	MANIFESTATION IN THE DESIGN
Awareness	• developed by the 'Experts' module where learners can reflect on the information provided, i.e. become aware of other strategies. • exposure to different types of tasks where different strategies are required so that the learner may become aware through practice of the most useful strategies for different activities. (note that for the research study only two tasks were designed)

Autonomy	• watching TV, listening to the radio and reading the newspaper are activities typically performed individually, i.e. the presence of another individual(s) does not necessary entail better comprehension, though it can promote discussion.
	• learners can work independently, at their own pace.
	• the structure of the program accommodates individual learner preferences:
	  • learners can make choices about what to work on, how to move within the modules, when and what help to consult. Informed control has been handed to the learners in that respect.
	  • provides varied strategic knowledge.

Authenticity	• learners have access to authentic texts and the possibility of choosing different media that equates to activities performed in real life situations: watching TV, listening to the radio and reading the newspaper. • tasks that promote actual strategies L2 learners use in understanding texts.

Table 4.7

It should be noted that these principles are interrelated, thus some physical manifestations of one principle could equally be part of another.

Innovations in CALL design are determined by our understanding of the *learner* and of the pedagogical *interaction* that is established with the materials. "Learning tasks must be designed so as to promote the types of interaction which our research identifies as providing optimal opportunities for learning" (van Lier, 1996:5). That is to say, improvements in the CALL design proposed will require research on the learner-computer interaction, what it is that the learner actually does with the materials, the tasks, the help facilities and the way these are presented.

A prototype of the program is included on a CD-ROM entitled **ImPRESSions** at the back cover of this thesis so the reader can try for him/herself all the features described in the present chapter.

In the following chapter the research study is described in which learners' use of **ImPRESSions** is the central aim under observation. It should be noted, at this point, that **ImPRESSions** does not include a tracking system to follow learners' moves as some research programs incorporate. The use of additional software served that purpose and thus is discussed in the next chapter.

Chapter 5
DESCRIPTION OF THE RESEARCH STUDY

The theoretical principles that underpinned the design of the computer program undoubtedly also have an influence on the kind of research design proposed. The simple point here is to acknowledge that "there is no such thing as theory-neutral observation of what learners do" (Garrett, 1995:354). This does not imply, however that the purpose of the study is to refute a theoretical aspect. On the contrary, this study will be in line with what is described as *grounded theory*: deriving the theory from data rather than collecting data with the aim of supporting or refuting a theory (Nunan, 1992; Strauss and Corbin, 1998).

The study here will not attempt to focus on manipulation of some pedagogical variables and look at the cause-effect relationship but rather focus on describing the nature of the language process. The fact that we still do not know exactly what is going on when learners work on CALL program(s) determines that the type of research that investigates causal effects sensibly needs to be carried out after we have a clear picture of the process. As a consequence, empirical, descriptive exploratory work is essential as a first step in CALL research.

5.1 RESEARCH APPROACH

Taking two of the parameters (synthetic/analytic and heuristic/deductive) suggested by Seliger and Shohamy (1989) the present study could be described in:

- *approach*: as closer to the synthetic end but not discarding analytical elements,
- *purpose*: as heuristic.

Basically, this is an exploratory study of strategy use in a CALL environment. The main aim of the present study is neither to look at learners' achievement nor at the effectiveness of a CALL design but rather at the nature of strategy use, in particular, the use of the help facilities with a CALL program which provides practice in comprehension skills. The approach followed in this study is what Chapelle, Jamieson and Park (1996:39) describe as *pedagogically-motivated interaction analysis*: 'the researcher investigates how learners use software which is hypothesized to have instructional benefits'. As we have illustrated in Chapter 3, multimedia CALL allows for the incorporation of multiple resources, options, choices. 'However, the potential value of these features of CALL remain speculative until we actually observe learners taking advantage of them' (ibid: 39).

Thus, the type of research design used is described as an "ex post facto" design (Hatch and Lazaraton, 1991). As they note, "this is the most common design type in applied linguistics for it allows us to discover 'what is going on' rather than 'what caused this'" (ibid:100). This type of design allows us to describe some data and see how values vary across subjects or groups of tasks.

McDonough (1995), discussing different research on reading comprehension, points out that it is not clear that failure of comprehension is due to:

- failure of decoding skills
- use of inappropriate strategies
- failure of synthesising skills
- failure of powers of inference from meaning to particular unknown words
- allowing preconceptions of meaning to override actual linguistic cues.

He continues to argue that "since empirical discrimination between these kinds of failure is hard to come by using traditional comprehension test and statistical treatments [...], it is probable that the only way to elucidate these processes further is to use qualitative methods of gathering and interpretation of process data". (ibid:38) This study will indirectly provide some insights into the issue of failure since using help facilities is one way of compensating for some of those failures mentioned above. Thus, it also seems relevant for this study to apply qualitative methods in the collection and interpretation of data.

The emphasis of the study is on the process rather than the product. Observing the process we will be able to observe the language learning strategies learners deploy when they use the help facilities provided. Process is an elusive term and not an easy construct to pinpoint. Process can be described :

> "as a series of evolving sequences of action/interaction that occur over time and space, changing or sometimes remaining the same in response to the situation or context. The action/interaction may be strategic, taken in response to problematic situations, or may be quite routine, carried out without much thought. It may be orderly, interrupted, sequential, or coordinated – or in some cases, a complete mess. What makes the action /interaction process is its evolving nature and its varying forms, rhythms, and pacing all related to some purpose." (Strauss and Corbin 1998:165)

In analysing the data for process then we should also identify how this action/interaction evolves and observe its changes, sequences and movement. Examining the data for those

changes over time or in response to eventualities forces the researcher to look for patterns. The identification of those patterns in the use of help facilities will be paramount in feeding back information to improve the program design. Furthermore, "qualitative data analysis adds richness and detail which can help answer nagging questions of "why" and "how" that may remain unaddressed by purely statistical results" (Ehrman and Oxford, 1990:324).

To sum up, the research approach adopted for this study is more in line with the qualitative research tradition although using when appropriate some quantitative techniques of analysis. In a sense this study will benefit from both traditions:

> '[...] because quantitative and qualitative methods each have their strengths and limitations, both kinds of research are necessary if we are to develop multifaceted insights that are at once broadly applicable and rich in observed detail. Both traditions can add immensely to our understanding of how students learn languages. Neither tradition will give the whole answer, but both together can provide a clearer picture of the processes of language teaching and learning.' (Green and Oxford, 1995:293).

5.2 RESEARCH QUESTION

The research question is:

- *How do learners make use of the help facilities of the CALL program described?*

Subquestions:

- Do learners use the help facilities in the intended way of the program design?
- Do learners use the language learning strategies that the program supports in relation to the use and non-use of the help facilities?

DEPENDENT VARIABLE	INDEPENDENT VARIABLES
The use of help facilities	Linguistic Level Perceived learning strategy use

Table 5.1

This study investigates variation of strategy use, in particular the use of help facilities, in terms of level, according to the IALS placement test battery; and of perceived learning strategy use,

according to the SILL Questionnaire (see Appendix A). These research instruments will be described in point 5.3 below.

Due to time constraints, we will observe only some of the help facilities the program provides. These include:

1. Dictionary
2. Cultural Notes
3. Transcript / Subtitles and Rewind Controls
4. Feedback
5. Experts

Why is the question worth investigating? The main answer to this is because it will provide information for future CALL material design, in particular, for the design of help facilities in programs dealing with comprehension skills. Moreover, there are other indirect implications that could be drawn as a result of this study. The type of research outlined can provide information on other areas of Applied Linguistics. The research may give insights into the following aspects of foreign language learning:

- Learning strategy use in a CALL environment
- Listening comprehension strategies
- Reading comprehension strategies
- Language learner-computer interaction
- Learner control (individualisation)
- CALL task design

5.3 DATA COLLECTION METHODS

As pointed out in section in Chapter 1, point 1.3, the use of verbal reports - asking participants to state what they believe they are doing when they perform a task - has been the most popular way of collecting data about mental processes. This data-collection method is not free from problems. Some problems reported in the literature are: biases in responses, inability to verbalise or remember strategy used, low self-awareness, etc. Nonetheless, it is regarded as a useful resource for hypotheses about mental processes, but not as a test to verify those hypotheses. Nisbett & Wilson (1977) argue that verbal reports cannot be used as evidence for the validity of the processes they reflect due to:

- unreliability of people's observations of own behaviour
- limitations in reporting the depth of mental process by conscious attention
- possible alteration of performance of the task

Thus it seems plausible to say that verbal reports are insufficient to produce reliable reports. Data from verbal reports, therefore, need to be substantiated by comparison with other evidence, a method known as *triangulation*. Using the data collected by the computer can help in overcoming the above limitations.

However, in the trial phase of the design of the program we experimented in introducing think-aloud protocols to observe how learners could cope with the task. After the trial, think-aloud reports were rejected for two main reasons:

Firstly, using this technique alters the process being reported on. The think-aloud protocol interfered with the usual development of the task since both tasks (trying to comprehend an aural or written text and trying to think aloud) impose a heavy cognitive overload on the learners affecting their performance. This equates to what some authors claim - when using the think-aloud protocols the thoughts the learners report are somehow being altered by the procedure (Nunan, 1992).

In addition, we identified other problems in the trial phase such as interference of L1 while performing in L2. Verbal reports by non-native speakers add another dimension to the problem. There is an additional complication of giving reports in a less than fluent language. To solve the problem researchers tend to ask informants to report in their L1. This, of course, only partly solves the problem since reporting in the L1 about something the informant is doing in the L2 may affect the operation in the L2. (McDonough, 1995). All these issues are still discussed and investigated in the literature of research methods (Cohen, 1998).

Secondly, it is essential to know how to implement think-aloud protocol in order to gather significant data. For instance, asking learners to verbalise thought without a practice session will be likely to produce poor results. "Poor verbal report data are often the result of poor methods of reporting" (Cohen 1984:108). Furthermore, we should take care in the training session not to influence the learner's verbal report. In the present study, it was not possible to carry out such training due to contextual circumstances, e.g. time available, learners' availability, number of

learners, and the fact that I was no longer teaching at the school where I conducted the experiment made it more complex to implement.

The problem then was to find another method that suited our circumstances and could allow for retrieval of some data on the mental processes involved in using the help facilities of the program. Considering the advantages and disadvantages of all the methods reported in the literature (Chapter 1, section 1.3) and taking into account the contextual circumstances of the study, we opted to use a retrospective semi-structured interview (details in section C below). We, however, provided learners with the option that whenever they felt like reporting what was going on while doing the task , they could verbalise it. This could help identify some issues that could then be discussed or corroborated during the retrospective interview.

The computer's ability to organise and accurately record data on the learning history of individual learners is an essential feature for carrying out research into what learners actually do when working with CALL; and hence it could serve to diagnose individual learning problems. However, it is limited in the quality of data that it can collect:

> 'although the machine may keep a record of "help checks" it cannot record "at what point in the text" the user asked for a particular piece of information [...] Such location data would have to be collected, say, through eye-tracking techniques, video recordings or spoken protocols' (Matthews, 1994:37)

In our case we use screen video-recording software in order to record all the actions and movements that the learner does on the screen. In that way we increase the quality of the data since we are not simply counting help consultations but also recording the learners' process to reach that consultation and the consecutive actions that the consultation may have prompted.
However, even having a complete description of learners' action on the screen, the computer cannot explain why learners do or do not make use of the help facilities. This information may be obtained from the retrospective questions in the interview.

Both data collection methods complement each other by balancing their own weaknesses and strengths. Jamieson and Chapelle (1987) favour the use of different methods :

> "It would also be useful to analyze computer-collected data along with data collected by other methods such as think-alouds or questionnaires.[...] The use of several methods, each with unique strengths and weaknesses, will allow for cross-validation that will result in more accurate assessment of students' learning processes." (ibid. 1987:543)

The obvious conclusion from all this discussion is that in this study part of the data will be collected by using both methods. The rest of the data will be collected by using questionnaires and tests.

The following is a summary of the data-collection methods that will be used in this study and the intended data to be obtained. A more detailed description is provided below:

	METHOD	DATA OBTAINED
Independent variables	IALS Placement test: CLOZE & Dictation listening test	data on linguistic level
	SILL Questionnaire	data on frequency of perceived strategy use
Dependent Variable	Computer tracking by video recording of screen: Lotus Screencam™	data on what learners do
	Audio Recording – Tape-recorder	data on what learners say and listen to when doing listening tasks
	Observation	data on what learners do as back up for computer crashes
	Interview	data on perceived strategies immediately after performance.
Other	Personal Information Questionnaire	data on learners' personal information: age, gender, etc.
	Evaluation Questionnaire	data on learners' impressions about their experience on the sessions and evaluation of **ImPRESSions**.

Table 5.2

A/ IALS Placement Test and Dictation Listening Test.

IALS Placement test is a Cloze test, which comprises 147 items deleted from 13 short passages, to be completed in a maximum time of one hour. This test is one of the instruments used to place IALS students in the different levels of their General English courses and has been extensively tested for reliability and validity.

Apart from classifying learners into different levels on their ability to complete a cloze test, it was thought that a listening component should be tested since learners could have a different level in their listening ability. The listening test chosen was a Dictation test, which is used as one of the components of TEAM (Test of English at Matriculation) to identify foreign students who need to receive English language support during their studies at the University of Edinburgh. Dictation may not be the most common type of listening test since it requires decoding aural input to written output without testing comprehension in terms of interpretation. However, it suits our purpose perfectly since in terms of the listening task of the program we are observing learners' use of the helps facilities which assist them in their decoding purposes. For discussion of the use of a dictation test for placement purposes, refer to Lynch, Heller & Wright (1995). Their research study showed high correlation between the Cloze test and the Dictation test, 0.559, $p<0.01$ for all values. This suggested that we could be testing learners twice without adding extra information as the listening test should not add significant differences. However, as we had a small number of students, it was thought that the distribution of students in different listening ability groups could vary slightly from the one provided by the cloze test. This variation could give us some extra information for describing learners' use of help facilities in relation to decoding the aural text. Therefore it was decided to implement the test, which is a text about the topic of listening to a foreign language containing 100 words in 12 segments. Students listened to the dictation from a tape.

The cloze and dictation tests are not included in this thesis for test confidentiality since the tests are still in use for IALS Placement .

B/ The SILL:

The *Strategy Inventory for Language Learning*, (Oxford, 1990) is an instrument for assessing the frequency of use of language learning strategies. Two revised versions were published in 1990 by Oxford:

- one for foreign language learners whose native language is English (80 items)
- the other for learners of ESL/EFL (50 items). (see Appendix A)

This procedure was organised according to strategy groups using a statistical procedure called factor analysis. Six groups were developed: Memory Strategies, Cognitive Strategies, Compensation Strategies, Metacognitive Strategies, Affective Strategies, Social Strategies.

The SILL appears to be the only language learning strategy instrument that has been extensively checked for reliability and validated in multiple ways (Oxford and Burry-Stock, 1995) More than 50 major studies have used SILL involving 10,000 language learners from different cultural contexts, 14 of those are described in (Bedell and Oxford 1996). The result of such research shows that strategy use frequencies vary across cultures.

The SILL questionnaire will be used as a way of drawing up the learners' profile of strategy use. The information gathered, however, will be limited since it will only reveal the learners' attitude to what they believe they do or have done but it will not tell us anything about what they actually do. That is to say, it will indicate the learners' perceptions of their strategy use.

Although this study is interested in investigating one strategy, i.e. the use of help facilities, we should understand it in relation to other strategies. Thus to have a general picture of the learner strategy use is appropriate. Furthermore, as Davis (1995), when discussing characteristics of qualitative data-collection, suggests, qualitative studies also often demand going one level up or even beyond to include contextual influences. In that way, the SILL questionnaire will provide information a level up or beyond the particular strategy under investigation.

The version used in this study is the SILL version 7.0 for ESL/EFL learners (Oxford, 1990) which takes about 20-30 minutes to complete.

C/ The Semi-structured interview:

The interview is semi-structured in nature since we had a guideline so the same questions were asked to the learners. However, some extra questions were asked in some cases to account for particular issues that arose during the task and to obtain a more accurate picture of what really happened. In the pilot phase, we observed that learners were not reporting as we intended since they mentioned general issues which sometimes were not relevant to what was intended. The

interview was first carried out at the end of the session after learners had done the exercises for two texts (for details see point 5.4 below) but we observed that learners had problems remembering what they did when working on the first text. As a consequence, the interview was divided into two parts, one set of questions after each text. In that way we avoided the problem of retention in learners' short-term memory although we were aware that the first set of questions could influence the way learners worked with the second text. The influence we observed was slight although it is a factor we take into account during analysis of the data.

The questions were designed taking into account the whole picture of the task process focusing especially on the use and non-use of the help facilities under investigation. Some questions were designed to observe what learners did when faced with a limitation of knowledge but decided not to choose a help facility as a strategy and to choose another strategy to compensate for her/his limitation. This type of information can only be obtained by this procedure and not by the computer as they are not observable behaviour but mental processes.

Learners were asked questions about the following areas:

- Problems in general comprehension of the text
- Skimming strategies/ Time pressure
- Vocabulary: Use of dictionary or compensation strategies
- Background knowledge: Use of Cultural notes / Information provided by first medium (when accessing same item of news from other media)
- Decoding problems due to: Accent and Speed of delivery
- Use of controls: rewinding and replaying
- Subtitles and Transcript use
- Experts section
- Task approach: option choice
- Exercises: statements and feedback.

For details refer to CD-ROM DATA. File: Retrospective questions. The interview took about 10 to 15 minutes.

D / Computer tracking: Screen Video-Recording

The final data-collection method is a fundamental one due to its accuracy in the collection of the process. The computer can record all the learners' moves. Information such as frequency of

access, mode of access, order of actions, will be most valuable in order to draw some conclusions and to try to define patterns of behaviour. Screen video-recording provides accurate information about what the learners *actually* do. The software used for that purpose is Lotus™ ScreenCam™ for Windows 95™.

ScreenCam™ is a PC video facility to create, manage, view and share PC movies, mainly used for presentations, product demonstrations and tutorials for company training programs. As this software is not specifically designed for the purpose intended here, some limitations were evaluated in the trial phase.

The ScreenCam was not compatible when the Windows™ Media Player was playing video, supposedly due to the computer video-card which cannot cope with those applications at the same time. Furthermore, it interferes with the use of subtitles since it distorts the synchronisation with the audio. Thus screen video-recording was not available for the Television tasks or was stopped when learners used subtitles. We relied on Observation and audio-recording to collect that information.

Another obstacle was storage space. ScreenCam allows for recording audio and video at the same time or separately. As reading or listening tasks were calculated to take about half an hour, the disk space needed for recording both at the same time would have been enormous. We decided to concentrate on the software capabilities for the video recording of the screen and discard recording the audio with ScreenCam. ScreenCam files with only the screentrack of half an hour occupy an average of 12,000 KB of space. That was considered manageable taking into account that the computer to be used had enough space for storing these big files. The computer used for the study had 2.5Gb of free space. The other related problem was how to transfer all theses files into smaller units. To solve this, we decided to use WinZip™ for compressing the files and making it manageable to store in a CD-ROM so we could view those files in other computers afterwards.

E/ Audio-Recording

Due to the restrictions mentioned above, a cassette-recorder was used to record any comment by learners during the session and the tracks of the listening activities, as well as the post tasks interviews. The cassette-recorder model was a Walkman type with VOR system (Voice Operated Recording) which automatically starts recording the sound and pauses when there is

no sound to save tape space. As this system depends on environmental conditions and to make sure that it started recording every time, an external table flat-microphone was connected (see Figure 5.1 below). We used 120-min tapes which managed to record the whole session on one side of the tape.

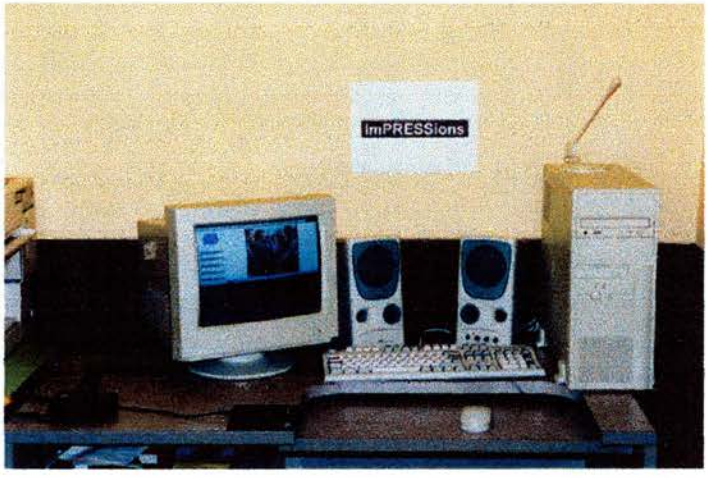


Figure 5.1

F/ Observation

Observation was implemented as a back-up to possible failures of technology as well as observing what was happening off-screen, e.g. learners taking notes, body language, etc. The learner and the computer screen were observed at the most appropriate distance and in the least obtrusive way possible so the learner could not feel so pressured or intimidated (Figure 5.2). Learners were aware that I was an observer but also saw me as technical support if the computer crashed.

Figure 5.2

For the Observation a worksheet was designed for each session to make it easier to focus on specific aspects under study (see example in Appendix D)

G/ Other Questionnaires.

Two questionnaires were designed, the first one to obtain personal information and to find out about learners' level knowledge of computer use; the second to know learners' opinions about **ImPRESSions** and their experience in the sessions. (see Appendix D, *Projecte ImPRESSions* for details)

Regarding the first questionnaire, we took into account informants who may have reservations about working with a computer. Fear of using computers or computer expertise are obviously influential factors to be considered. Less computer-literate users could show anxiety resulting in poor reported data. This fact, however, should not be deterring less computer-competent learners from taking part in the study. I believe that one of the central aims of good CALL design is to encourage learners' awareness of the usefulness of using computers for language learning. The point here is that these issues are considered for consequent analysis of the data collected from those types of informants.

Summarising the points in this section, the advantage of using a variety of data-collection methods and gathering data from a variety of sources is that it allows for triangulation and helps to build a more holistic picture of the phenomenon in question.

5.4 DESCRIPTION OF PROCEDURE: TIMETABLE, PLACE, PARTICIPANTS, MATERIALS and TASKS.

5.4.1 MATERIALS

Some of the texts used in **ImPRESSions** were tested in a conventional environment , i.e. in the classroom, to evaluate the appropriacy of the texts and exercises during the academic year of 1998 at the Institute for Applied Language Studies (IALS) , University of Edinburgh. An IALS English teacher collaborated on using one of the news items for her upper-intermediate reading

class. We used the newspaper article and the related TV item to observe how learners managed to do the exercises and their responses to the texts. This helped to target the level of the learners to be studied and observed possible problems that they may encounter when faced with these types of exercise. Observation was carried out informally and as they worked in small groups I could monitor their reactions, strategies and use of dictionary. The texts and the exercises worked quite well and prompted some discussion on how learners cope when there is knowledge limitation or decoding problems in understanding TV news. The fact that they read the article first made the task of understanding the TV item easier. That lesson raised learners' awareness of the importance of reading newspapers regularly, since this could help in their knowledge of the topic and increase their vocabulary for understanding later TV news better.

For the study it was decided to use four news items from two media each which learners worked on in four different sessions. This allows us to observe differences and similarities in the process of the four sessions. We decided to alternate reading and listening tasks since it was one of the main features of the program (see *Chapter 4*). To allow comparisons, learners were restricted to follow the same procedure in the same order using **ImPRESSions**.

The four sessions used the following procedure and news items:

Session	Tasks	News Item
1	First encounter – reading article General comprehension question Detailed comprehension questions Second encounter – listening to the radio Detailed comprehension questions	Plans for extra funding to overcome NHS winter crisis
2	First encounter – listening to the radio General comprehension question Detailed comprehension questions Second encounter – reading article Detailed comprehension questions	Appointment of the first UK drugs tsar.
3	First encounter – reading article General comprehension question Detailed comprehension questions Second encounter – watching TV news item Detailed comprehension questions	Advertising campaign to recruit graduates to become teachers

4	First encounter – watching TV news item General comprehension question Detailed comprehension questions Second encounter – reading article Detailed comprehension questions	The historic first meeting between Tony Blair and Gerry Adams

Table 5.4

The topics chosen were varied dealing with social and culture-specific issues but the topics underlining the news were relevant to the Spanish learners since in Spain issues such as funding of public health, drugs problems, educational issues and politics related to terrorism are unfortunately common ground.

As mentioned in Chapter 4 the design did not permit the navigation freedom element where learners could start working from any medium they wanted since for research reasons we needed learners to follow the same tasks. Another four news items were prepared as back-up but in the event they were not used for the study.

For further details of the texts and tasks, refer to Appendix B or the actual program on CD-ROM **ImPRESSions**.

An informal pilot test to evaluate the data-collection methods and appropriacy of materials, and to correct possible 'bugs' of the design of the program was also undertaken with two year-round Spanish students at upper-intermediate level. Such learners usually study at IALS for an average of three months. The present study, however, was carried out with adult students of English from Escola Oficial d'Idiomes n,2, (EOI2) Barcelona, Spain. As differences could occur between IALS learners and the target learners of the present study some of the materials and methods were also trialed with two of EOI2 students.

Some corrections and adjustments on the instruments to be used were implemented as described above in section 5.4, e.g. retrospective interviews instead of think-alouds, ScreenCam decision to record only the video track, use of tape-recorder instead, the most appropriate moment to conduct the retrospective interview, and more specific questions to be asked to obtain more relevant data.

5.4.2 FINDING PARTICIPANTS AND ORGANISING THE SESSIONS

The 22 participants of the present study were Spanish adult learners of English attending the 4th and 5th level of the EOI2, Barcelona, who volunteered to participate in the project. EOI2 students usually attend two-hour English lessons twice a week, either Monday-Wednesday or Tuesday-Thursday, classes ranging from ten in the morning to nine at night. EOI2 students are adult learners from different professions and backgrounds. CALL is scarcely implemented in the school curriculum, although a computer room for self-access is available.

I showed the program in a 10-minute presentation to each of the 4th and 5th level classes (14 classes for 4th level and 10 classes for 5th level) over two days and explained what the project involved in order to obtain volunteers. The presentation consisted of demonstrating briefly the operation of the program and the potential benefits that learners could obtain from using it. At the end of the presentation, learners who were interested were given a hand-out (see Appendix E, Handout *Projecte ImPRESSions*) explaining in more detail what was involved in the project, how to join the project, indicating the date and time of the linguistic tests and stressing the importance of learners' commitment to the project.

The response of the EOI2 students was surprisingly vast. 102 students expressed their interest in the program and wanted to join the project. I was surprised by this vast response which I attributed to two main factors: one, the fact that I went to each class presenting the program in a portable computer motivated many learners' curiosity to see the actual profits for learners and second, the academic year of the EOI2 was drawing to an end (April and May 1998) and most learners wanted as much practice as possible to prepare for the end-of-the course exams. At both levels, the tests include reading and listening components, where news items are most of the time used as the main texts. The latter is a relevant factor to take into account when analysing the data.

The available time to carry out the study encompassed six weeks. To accommodate as many students as possible, a timetable was designed taking into account the availability of the room. The only available room with a powerful computer for the experiment was the Director's room which was also used for the weekly Direction Board meetings on Wednesday mornings. For the rest of the time the Director moved to a shared office. The timetable was as follows: sessions were calculated to take an hour and a half, and I left half an hour between sessions just in case learners took longer, to avoid sessions overlapping. There were five sessions on Mondays,

Tuesdays and Thursdays, four sessions on Fridays and three sessions on Wednesday evenings. Times of the sessions were 10:30–12:30, 12:30-14:00, 15:30-17:00, 17:30-19:00 and 19:30-21:00.

Two days were assigned for the linguistic tests, on Tuesday and Wednesday, and two times assigned, one in the morning and one in the afternoon, to allow all the learners interested the same possibilities. We should point out that EOI2 learners attend classes at different times during the day. On the day of the linguistic tests, students first had to find four available spaces in a timetable of six weeks where they could attend the school and work with the program **ImPRESSions** on an individual basis. The only limitation was that learners could not choose two sessions on the same day, to avoid tiredness as an impeding factor. If the dates and times available were not suitable for them, they did not sit the tests and didn't proceed further. Most students who couldn't join the project expressed their disappointment since they really wanted to try the program. The tests took an hour and 15 minutes to complete.

In total 24 students took part in the project, two of whom were used for piloting materials and research procedures on the first day of the first week to allow for some last-minute adjustments, as mentioned in section 5.3 above. Those two students completed the four sessions but the data they produced has not been analysed in the study since some adjustments were made after the first session. All the 24 students that took part attended all the sessions, although a couple of them had to postpone dates for personal reasons. We used the few spaces left in the timetable for these changes. The commitment to the project was another surprise since I expected some students to drop out. Probably the demand of interest from so many learners meant that the learners who managed to participate were really motivated and committed.

5.4.3 PROCEDURE OF SESSIONS

As we mentioned in the previous section, before the sessions started each student sat the two linguistic tests: IALS Placement Test and Dictation Listening Test, described in 5.3. Students jotted down their names in the timetable and proceeded to do the tests. They did the reading test first and then the listening test. At the end of the tests, learners were reminded to commit to the project and they were handed the SILL questionnaire to complete at home. They were asked to return it the day they chose for their first session.

On the first session for each learner, the SILL questionnaire was collected and they were asked if they understood all the statements or had any linguistic problems. In some cases, learners asked a couple of vocabulary questions about the questionnaire and ranked the statements that they had previously been unsure about.

At the start of Session 1 the first ten minutes were devoted to showing the program to the learners with a news item not included in the study so learners could have a brief idea about how to operate the program. The same explanations and details were given to all the students following as much as possible the same order and procedure, although inevitably some specific explanations arose to specific questions from some individual learners. It was preferred to do it in this way rather than presenting that information on paper or PC screen to introduce some human contact and thus to make them feel that I was there not simply observing them but to assist them with any potential technical problems they may encounter. The reliability of the study in this case was sacrificed in favour of the validity of the procedure. In any case, they could consult the HELP of the program, if in doubt, to find out operational issues and the structure of the program. In the explanation some aspects were emphasised:

- The program was not intended to test them but it was envisaged for learning. We were trying to avoid the "test-mania" that learners have when exams are near.
- They could think aloud or verbalise their thinking if they felt they could do it while reading or listening.
- They had to work on the indicated news item and follow the order of media proposed. However, they could use the Experts module whenever they wanted, at the start, middle or end of the session.
- They had to answer some questions orally about what they did after each text.

Learners used the program **ImPRESSions** in the four sessions as indicated in Table 5.4 above. After each text and corresponding exercises they were asked some retrospective questions about their performance following the guidelines of the Interview questionnaire (see Appendix D). A summary of how one session developed follows:

Example of Session 2 procedure

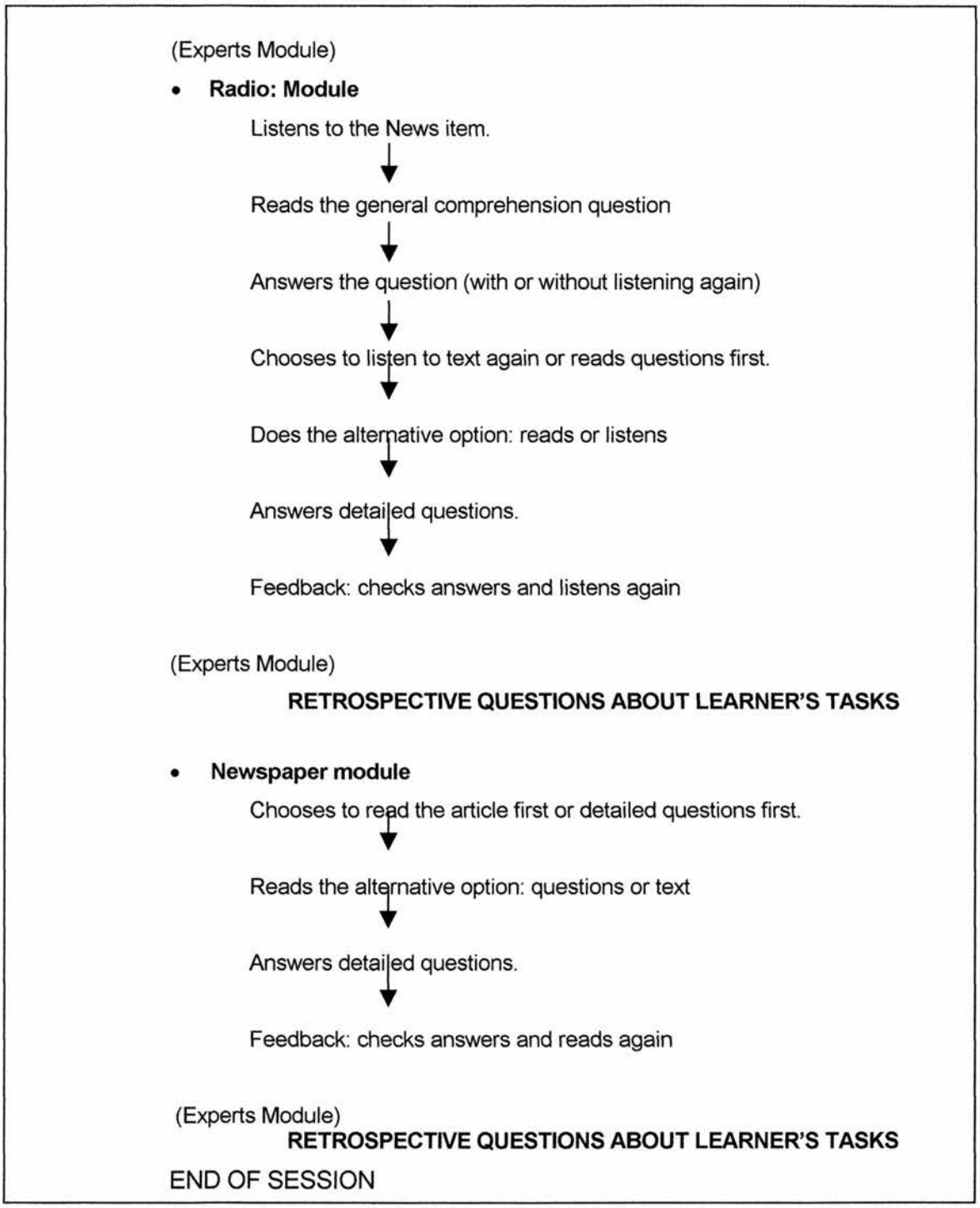


Figure 5.3

Figure 5.3 is a reflection of the most common procedure the learners followed. Obviously the actual sessions were slight or large variations of the above.

At the end of session 4, an evaluation questionnaire was handed out to complete either there at that moment or at home. Although we had in mind that learners would not return the questionnaire, the last option was considered because some learners could not complete the questionnaire there and then, since they had other commitments after the sessions, e.g. going to work, going to their English class at the school, going to University, etc. I tried to make sure that all questionnaires were returned completed, however, four learners never returned it.

5.5 ANALYSIS OF DATA

The information recorded by the computer, the observation and the retrospective interview provide us with a rich amount of data on the actual performance of the learners. Questions to be asked when analysing the data of each help facility are:

- What sort of help facilities do learners use?
- When do they use them?
- How many times do they use them?
- How do learners use the help facilities?
- Why do learners access those help resources and not others?

As for the How question we will use coding procedures to identify the different dimensions and properties which could allow comparisons between individuals and groups of individuals in their use of help facilities.

Descriptive statistical analysis will be used to analyse the data in order to identify similarities and variations between different sets of groups classified by different *learner differences* in terms of level and perceived strategy use, and try to find relationships of the variables among the data. For the statistical analysis we used SPSS for Windows program to count frequencies and analyse results of tests. Descriptive statistics and some correlation analysis were performed to try to explore relations within different aspects of the data.

We should acknowledge that a possible consequence of interpreting the data will be that some other elements will emerge which will prompt further or different ways of analysing and interpreting the data. Interpretative qualitative research is cyclical in nature (Davis, 1995; Strauss and Corbin., 1998).

5.6 LIMITATIONS and PROBLEMS

The large amount of hard data collected has forced us to concentrate on some specific aspects and therefore, we should recognise that other interesting aspects have not been included here due to practical constraints.

The varied quantity and varied informative value of the data makes identification of strategies difficult and poses considerable interpretation problems. The issue of identification of strategies and classification is not an easy one and is paramount for replication of the study. In that sense, in order to be consistent with our analysis and for replicable experiments we have to identify the strategies, then classify them accordingly and, finally, identify patterns within the different groups of learners identified by the independent variables. Identification of strategy from the data obtained by the retrospective questions and the computer screen-recording would be ideally carried out with the collaboration of another observer to achieve higher internal reliability of the study. This has not been possible but some external observers have been involved in dealing with some conceptual issues, e.g. word relevancy to the questions (see point 6.2.3).

When using computers in research one major problem is the likelihood of the computer crashing. This factor was considered from the start of the research design and was one of the main reasons for introducing the observation method in the research process to avoid losing relevant data. This fact is considered in the analysis of the data since computer crashes directly affect the working process of the learners.

5.7 SUMMARY OF THE RESEARCH STUDY

SUMMARY OF RESEARCH STUDY	
Approach	Closer to the synthetic/holistic end
Purpose	Heuristic
Research question	How do learners make use of the help facilities in the CALL program described?
Dependent Variable	The use of help facilities
Independent Variables	Level / Perceived Learning strategy use
Data collection methods	IALS Placement test / Dictation Listening test / SILL Questionnaire Observation / Computer tracking: ScreenCam™
Informants	Spanish learners of English from EOIn2 Barcelona Level: 4th and 5th EOI level
Software	**ImPRESSions©**
Texts	4 newspaper articles / 2 radio news extracts / 2 TV broadcasts
Tasks	4 general comprehension questions and 8 sets of detailed comprehension questions.
Procedure	a/ Two sessions for Linguistic Tests b/ Fill in questionnaire(s) at home c/ Four sessions to perform comprehension tasks combining media using **ImPRESSions**
Data analysis	Descriptive statistical analysis

Figure 5.5

Chapter 6
RESULTS AND DATA ANALYSIS

This chapter describes the results of the tests, questionnaires and data analysis of the use of help facilities. We first describe the population that took part in the study and then introduce the description of students' use of each help facility in turn: the dictionary, cultural notes, transcript, subtitles and play controls, feedback and Expert module.

The 22 students' transcripts of the retrospective questions are included in floppy disk called **ImPRESSions** DATA. We should point out that these data are presented as raw data and thus we have not been translated them into English. However, the data related to the use of the dictionary and the Cultural notes are summarised in English. Some general tables and graphs which are referred in this Chapter are included in Appendix C.

6.1 DESCRIBING AND CLASSIFYING THE POPULATION

In this section we will describe the subjects of the sample and their classification. For statistical purposes and to make it operational in the discussion we have chosen to classify learners in groups according to their linguistic level and perceived strategy used.

6.1.1 SUBJECTS

The age of the 22 students who participated in this study ranged from 19 to 50, with a mean of 26.55 and there were 13 females (59.1%) and 9 males (40.9%) students in the sample. To retain anonymity of students we will refer to them as letters, e.g. student A, B, C, etc.

As the study was conducted in Barcelona, all the students had knowledge of the two official languages spoken in Catalunya: Spanish and Catalan. 10 students' mother tongue was Spanish (45.5%), 8 students' mother tongue was Catalan (36.4%) and 4 students both languages (18.2%) - see Appendix C, Table Dem3, p. lxviii. Mother tongue is understood here as the language spoken at their parents' home, so learners who reported both had parents who spoke both languages.

Regarding their computer skills, 20 of the students reported average computing skills (91%) and 2 students (8%) reported to have high level. All students use the computer either for work, study or pleasure. The frequency of Internet use was divided as follows: 5 (22.7%) students reported to use it daily, 10 (45.4%) students weekly and 7 students (31.8) sporadically. Therefore, we could assert that the students in the sample were not alien to the computer and Internet environment. We should take into account that students were volunteers and thus learners with fear, aversion or with very poor computer skills may not have been interested in the project in the first instance.

6.1.2 LINGUISTIC LEVEL

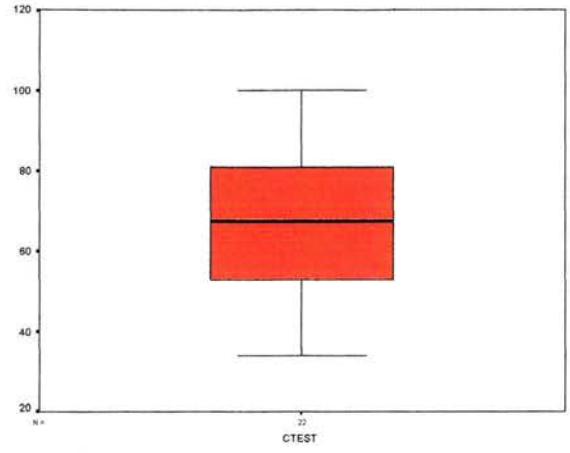
The linguistic level was assigned by the Cloze test scores and the Dictation Listening test. The Cloze scores range from the lowest score of 34 to the highest of 100 out of 146 items with a mean of 67.95 (see Appendix C, Tables L1 and L2, p. lxix).

The students' distribution according to IALS Placement for General English courses is as follows:

IALS Placement	Score	No of Students	Students
Advanced (Ad)	≤ 89	4	N / P /A / U
Upper – Intermediate (UI)	63 - 88	7	T / M / R / O / J G / F
Intermediate (Int)	37 –62	10	Q / B / K D / V / I / S / E / L / H
Pre-Intermediate (PI)	23-37	1	C

Table 6.1: Classification of students regarding Cloze test

In the discussion of each help facility we will take this distribution for exploring patterns of behaviour. However, as we have a small sample and because of parsimony of data analysis, in some cases we chose to divide the sample into two groups, the Advanced and Upper-Intermediate are classified as Higher attainers (HA) and the rest as Lower attainers (LA). Coincidentally, there are 11 students in each group. That symmetry is illustrated by the following box-plot (Graph 6.1) which shows that half of the scores fall above and half below the median represented by the black horizontal line. This graph demonstrates that our sample includes students at all linguistic levels: high, average and low.



Graph 6.1: Boxplot of Cloze test results

Regarding the listening test, the lowest score was 22 and the highest 83 with a mean of 43.14. To examine if there were differences between the tests, the students' scores on both language tests were correlated. Table 6.2 shows the Pearson results for individuals' scores.

		Listening TEST	*Cloze TEST*
Listening TEST	*Pearson Correlation*	1.000	.756(**)
	Sig. (2-tailed)		.000
	N	22	22
Cloze TEST	*Pearson Correlation*	.756(**)	1.000
	Sig. (2-tailed)	.000	
	N	22	22
** Correlation is significant at the 0.01 level (2-tailed).			

Table 6.2: Correlation of Listening and Cloze tests

Consequently, the inter-test correlation indicates that there is a significant direct relationship between the two tests. This result is in line with what was found in the study by Lynch, Heller & Wright (1995). Thus, the listening test adds little information as regards the linguistic level of our sample.

However, the distribution of learners varies slightly, as illustrated in Table 6.3, so we prefer to follow the Listening test scores when discussing the help facilities related to decoding aural input, e. g. transcript, subtitles and, replay and rewind controls.

Classification	Score	No of Students	Students
Higher Decoders (HD)	≤ 70	4	U / N / P / R
Average Decoders (AD)	69 - 40	7	A / B / D / O / J / F / G
Lower Decoders (LD)	39 –30	7	V / M / L / E / T / I / K
Poorer Decoders (PD)	> 29	4	Q / C/ H / S

Table 6.3: Learners classification regarding Listening test

6.1.3 PERCEIVED LEARNING STRATEGIES USE

Table 6.4 presents the means and standard deviations obtained in the SILL Questionnaire and its different components. On a scale of one to five, the most frequently used of the strategies (higher scores indicate more frequent use of strategies than do lower scores) are those under *Learning with others* followed by *Compensating strategies*. Compensating strategies are of particularly relevance in this study as they are directly related to the use of some help facilities.

	N	*Range*	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
Remembering effectively	**22**	**1.89**	**1.66**	**3.55**	**2.71**	**0.43**
Using Mental processes	**22**	**1.93**	**1.92**	**3.85**	**2.95**	**0.60**
Compensating	**22**	**2.67**	**1.66**	**4.33**	**3.46**	**0.66**
Organising and evaluating	**22**	**1.89**	**2.33**	**4.22**	**3.38**	**0.55**
Managing Emotions	**22**	**2**	**2**	**4**	**2.88**	**0.56**
Learning with others	**22**	**2.83**	**2**	**4.83**	**3.56**	**0.79**
TOTAL SILL	**22**	**1.32**	**2.42**	**3.74**	**3.13**	**0.39**

Table 6.4: Descriptive statistics of SILL questionnaire and its components.

As for the rest of the components and the total, following the key to understanding the averages of SILL in Oxford (1990) we conclude that the students in the sample have a medium use of learning strategies.

Key to understanding the averages:		
High	4.5 to 5.0	Always or almost always used
	3.5 to 4.4	Usually used
Medium	2.5 to 3.4	Sometimes used
Low	1.5 to 2.4	Generally not used
	1.0 to 1.4	Never or almost never used

Table 6.5: Distribution of scores in SILL Oxford (1990)

To investigate a possible relationship between the linguistic tests and the SILL, we have correlated the scores of the tests and the SILL scores which show no significant correlation between them. The frequency of perceived learning strategy use is therefore not dependent on the linguistic level of the students in our sample. We also performed a Pearson Correlation of the different components of the SILL and the linguistic tests which produced non-significant results for each of the components on the linguistic tests. (see Table SILL2 in Appendix C, p. lxxi)

As we are mainly interested in students' compensating strategies in relation to their use of help facilities, we have classified learners taking into account their perceived use of compensating strategies. In order to place students into groups we have followed the distribution of the frequency of strategy use suggested by Oxford (1990) shown in Table 6.5 above. The classification of students is as follows:

Classification	Frequency of use	Average	No of Students	Students
Higher Compensators (HC)	Usually used	3.5 to 4.4	14	I / S / G / K / N / D / U / T / R / Q / A/ P / V / O
Average Compensators (AC)	Sometimes used	2.5 to 3.4	6	J / E / L / H / C / B
Lower Compensators (LC)	Generally not used	1.5 to 2.4	2	F / M

Table 6.6: Learners' classification regarding Perceived Compensation Strategies scores in SILL

6.2 THE USE OF DICTIONARY

In this section we will describe learners' use of the dictionary following the questions stated in Chapter 5, point 5.5: what, when, how many times and how students use the help facilities or a combination of those. The why question will be included in the answers of the other questions to try to justify or obtain a better picture of the reasons behind the facts.

The extensive description of the use of dictionary for each student is included in **ImPRESSions** DATA Disk under the folder entitled Dictionary use. It shows the following information:

- Word looked up
- Where students encountered the word
- Relevancy of the word for answering the questions
- When students accessed the dictionary
- Which dictionary they used
- When students checked the definition
- If they read the whole entry
- If they checked the context
- The definition that students chose
- Why they looked up the word
- What students did after looking up the word
- Technical Problems encountered
- Other information provided when doing the task or in the retrospective questions.

The above information provides the basis for our descriptive statistical analysis which will be presented below. Some particular references will be drawn from these data to exemplify relevant points in the discussion.

6.2.1 HOW MANY TIMES and HOW MANY WORDS

Table D1 in Appendix C illustrates the total number of times the students consulted the dictionary either monolingual or bilingual in each session, with an overall total of 480 times during the study.

Exploring a possible relationship of the number of look-up times with the linguistic level of students we correlated their scores in the Cloze test with the total number of times students accessed the dictionary, which produced non-significant results. At the same time, we correlated the totals of the SILL and the Compensating strategies component which also produced non-significant correlation. Thus, neither the level of the students in the sample nor their strategic perception in general or in relation to their compensating strategies influence the amount of times they accessed the dictionary. (see Table DICT1 in Appendix C, p. lxxii)

Taking into account the linguistic level of the students we can observe some tendencies in the frequency of times learners look up the dictionary, 11 students are below 20 look-up times and 11 students above. However the distribution shown in Table 6.7 below illustrates clearly the lack of relation between linguistic level and look-up times since students from different levels vary in the amount of times they use the dictionary.

Frequency	No of students	Percent	Students' Linguistic level		
			Ad	UI	Int – PI
2 - 10	6	27.3	N / P	R / J	H / Q
11 - 20	5	22.7		M	I / K / S / V
21 - 30	6	27.3	A / U	F	B / D / E
31 - 61	5	22.7		T/ O/ G	C / L

Table 6.7: Frequency of look-ups according to level

At this stage of our exploration we could point out that there may be individual differences in our sample which influence the number of times students consulted the dictionary. The fact that we had a relatively small sample size also determined those results. On the other hand, it could be suggested that the CALL environment may be a relevant factor for the variation within the levels. The absence of a substantial relationship between linguistic level, compensating strategies and word consultation may well be explained by the students' decision to use the dictionary not only due to unknown words but to verify meanings. The fact that Internet dictionaries do searches for the students may prompt them to look up more words than in a conventional environment. For instance, some students either consulted words to confirm their self-generated inference or words which they already knew but were not sure of.

Another factor which may have influenced the lack of correlation is the actual circumstances of the learners when they came to the sessions. Student Q for instance was quite tired in sessions 1 and 2 since he came to those sessions directly from working a night-shift.

Although there was no correlation between perceived Compensation Strategies and look-up times we explored further since in the SILL questionnaire there is a statement directly related to word consultation. Statement 27 reads as follows : **I read English without looking up every new word.** Students should rank the statement from 1 to 5, being 1 Never or almost never true of me and 5 Always or almost always true of me. Based on this we can presume that learners who answered 1 used the dictionary more often than the ones who answered 5. However, comparing their answers with the look-up times (see Table 6.8a below) we observed an inconsistency.

ST	Statement 27	No. of LOOK-UPS
F	1	21
M	1	12
B	2	30
C	3	59
G	3	61
P	3	3
A	4	23
E	4	23
H	4	7
K	4	13
L	4	33
O	4	45
Q	4	2
R	4	4
D	5	28
I	5	12
J	5	8
N	5	11
S	5	14
T	5	38
U	5	21
V	5	12

Table 6.8a: Statement 27 and Look-up times

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Statement 27	22	4	1	5	3.86	1.24
Look-ups TOTAL	22	59	2	61	21.8181	16,8625

Table 6.8b: Descriptive statistics of Statement 27 and Look-up times

Student M has been classified in the low frequency of dictionary use but she rated statement 27 as never or almost never true of me. Student T behaved the other way round, she perceived herself as not looking up every new word in the dictionary but in the study looked up the dictionary well above the mean of 21.8 (Table 6.8b). Students C and G who looked up words the most often of the whole sample answered statement 27 as "sometimes true of me" which does not coincide with how they behaved in the sessions. Therefore, there is some evidence to think that either some learners did not understand the statement or they were confused by the negative word of the statement "without" and the never and always adverbs of the rating. Another possibility may be that learners perceived themselves in that way but actually behave differently or simply that the CALL environment prompted them to behave differently in our study. In any case the inconsistency observed could have contaminated the results of the insignificant relation (Correlation:-0,164, α= 0.465) between statement 27 and word consultation as shown in Table DICT2 in Appendix C.

The number of times that students consulted the dictionary also varies among the sessions. Table 6.9 below clearly illustrates that learners used the dictionary in session 1 less often (with a mean of 2.3) than in the rest. Different factors may have influenced that result. A possible reason may be that students were more concerned with the operational aspect of the program in the first session since they were less skilful in using the whole range of possibilities the program offers. Once students were more confident in their use of the program, their concentration shifted from the operational aspect to the actual task solving as demonstrated by the higher means of the other three sessions. From the observation and the retrospective questions, there is also evidence to suggest that in session 1 some learners tried to assess the difficulty of the texts, since they wanted to know how they managed to score without working intensively on the task which in most cases would have implied looking up more words. They probably relied on their inference or even avoiding strategies to self-assess their performance against the difficulty of the texts. Once they assessed that they needed a more intensive study to perform the detailed comprehension task, in the subsequent sessions they used the dictionary more often.

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Session 1 Newspaper	22	4	0	4	0.95	1.36
Session 1 Radio	22	5	0	5	1.40	1.73
TOTAL Session 1	22	8	0	8	2.3636	2.8038
Session 2 Radio	22	11	0	11	3.81	3.11
Session 2 Newspaper	22	10	0	10	3.13	2.93
TOTAL Session 2	22	20	1	21	6.9545	5.2957
Session 3 Newspaper	22	13	0	13	5.54	4.29
Session 3 Television	22	7	0	7	1.72	1.98
TOTAL Session 3	22	17	0	17	7.2727	5.2570
Session 4 Television	22	6	0	6	1.54	1.79
Session 4 Newspaper	22	18	0	18	3.68	4.50
TOTAL Session 4	22	22	0	22	5.2272	5.3446

Table 6.9: Descriptive statistics of Look-up times per session and sections

Based on these statistics it seems that in session 1 students were experimenting and "trialing" the program which clearly had an influence on their amount of dictionary use. As student V reported in the retrospective questions of session 1: "I had enough with what I was doing and as you said it is an Internet dictionary...I preferred not to use it...at this point I didn't want to make my life more difficult...maybe later on when I have more command ..." Therefore, session 1 shows an exception to the pattern followed by the other sessions whose means are quite close: session 2, 6.95, session 3, 7.27 and session 4, a mean of 5.22. The lowest of the three is session 4 which could indicate that learners found less unknown words in the texts and questions of that session than in other sessions or alternatively we could also suggest that in session 4 students used more inferring or avoiding strategies resulting in using the dictionary less often. Another possible factor which may have influenced the number of look-ups can be the students' interest in the topic or their professional background since some learners may have looked up more or less words depending on how involved in the topic they might have been. However, this aspect was not considered in a systematic way in the study and thus we cannot suggest possible influences in the number of look-ups. In some cases, the knowledge of the general topic may have had an influence although nobody had previously seen or read or heard any of the news items presented.

One interesting aspect is the evolution of the amount of look-ups among the sessions with regards to the newspaper sections. With the exception of session 1, which we could consider exceptional due to reasons mentioned above, students looked up the dictionary less often when they worked with the newspaper as Second Encounter (a mean of 3.13 in session 2, and 3.68 in session 4) whereas when students read the newspaper as First Encounter as in session 3, they used the dictionary more times with a mean of 5.54. This fact may suggest that students had more related vocabulary when they worked with the newspapers as Second Encounter since they had worked with the same news item from other media. This argument could be supported by what students reported in the retrospective question about how the first text assisted in the comprehension of the second. The majority of students reported that it certainly assisted them in their comprehension, as student D reported in session 2:

> "**Tutor**: Do you think that the fact of listening to the radio news item first helped you understand the article?
> **St.D**: Yes, as it's the same topic it helped me. I already had an idea...well, an idea and most of the information.
> **Tutor**: At the level of vocabulary did it help?
> **St.D**: With certain words, yes...for instance, ***legalisation, drug, prison***, ...well, all the words related to this (*referring to topic*)
> **Tutor**: Did listening to the radio first help you concentrate on other aspects?
> **St.D**: Yes, as I already knew the topic ...well, I may have concentrated on the new vocabulary or other aspects."

These results may support the principle behind the design of **ImPRESSions** where students have the possibility of encountering the same news item from different media and thus assisting in their comprehension. However, it could equally be said that aspects such as the difficulty of text and questions in terms of unknown words could have influenced the number of look-ups and thus in the newspaper article of session 3 there was more likelihood of unknown words than in those of sessions 2 and 4. To demonstrate this was not the purpose of our present study since we should have rated the difficulty of the texts in terms of possible unknown words in relation to the target level of students. We simply assessed the level of the articles on a more holistic basis taking into account topic, complexity of grammar structures and possible unknown vocabulary. Nevertheless, we should acknowledge that possibility which the data seem to reveal.

Another aspect explored is the differences in the total of look-ups between the written and aural input. The number of times students consulted the dictionary in the newspaper sections was higher than in the radio and TV sections together as illustrated in graph GD1 in Appendix C, p. xxxvi. Moreover, as revealed in tables D6 to D9 in Appendix C, the number

of words looked up in the listening or viewing sections of each session came from the questions (92 words, 56.4% of the total), rather than from the texts (53 words, 32.5% of the total) which was the opposite for the newspaper sections: from the questions: 50 words (17.9%) and from texts: 203 (72.7%). We should point out here that the number of look-up times is higher than the actual number of words students looked up since they sometimes looked up some words twice or three times in different dictionaries.

The obvious reason for that difference in aural and written input is that not all the students made use of the transcript or subtitles which was the most common procedure when learners looked up words from the aural texts (79.2% of the total words looked up from aural texts). However, there were 11 instances (25.7 %) where students looked up words or possible heard words from the aural input. This is understandable since students who do not know the meaning of an acoustic form can rarely spell the word and thus they do not even try to look up a similar or approximate spelling of the word. As Student M reported in the retrospective questions of session 2:

> "**St M**: [...] the word that you catch but you don't know what it means...if I only know how it is pronounced, ...I couldn't look it up. Well, I could, I could try the dictionary...but it is better to ask somebody, you know...
> **Tutor**: No, I do not follow what you are trying to say
> **St M**: You know, if I only know how it is pronounced, but I don't know how to write it...it can be written in several ways from what you hear. I can't look it up... except if the dictionary is one of these intelligent ones that tells you how it is written."

Surprisingly, there were 4 students (B, C, G and H) who tried to look up words from the aural input which they either successfully managed to recognise or tried to experiment with the spelling to obtain the desired word in the dictionary search as illustrated in the following table.

Word (s) looked up	Actual Word(s) in text	Session	Student
take over	makeover	3 -Television	B
make over (verb: make)	makeover (n)	3 -Television	B
take over	take cover	4 -Television	B
streamlights / streem / stream	streamline	2 -Radio	C
skim	scheme	2 -Radio	C
make over (verb: make)	makeover (n)	3 -Television	C
strugle / struggle	struggle	3 -Television	C
resource	resource	2 -Radio	G
get across	get across	3 -Television	G
strugle / struggle	struggle	3 -Television	G
make over (verb: make)	makeover (n)	3 -Television	H

Table 6.10: Look-ups from aural input

For a detailed account of the task process for two of these instances (Student C, session 2, radio, words: *streamline* and *schemes*), the reader should refer to the file named StC S2R.doc in the *On-Off Screen Data* folder in the **ImPRESSions** DATA Disk. The piece of description has been highlighted so the reader can easily identify it. It is interesting to see how student C managed to catch the sound but because of a lack of dictionary skills he failed to reach a successful result.

It is interesting to note that students B and G were classified as Average Decoders (AD) and students C and H as Poorer Decoders (PD) if we take into account their listening test results. The latter students did not perform well in the listening test but observing them working we could assert that they showed a sophisticated skill not shown in either of the Higher decoders (HD) or in the majority of AD students.

The fact that Internet dictionaries do searches of spelling approximations can prompt learners to start experimenting with looking up more unknown words from aural input. We particularly think that this skill should be developed as it is relevant for real life communication. If learners are trained to decode the sounds of unknown words and manage to repeat them even if they do not know the meaning of the actual word, we are assisting learners to improve their listening comprehension. In real life, if foreign students have that ability they will be more independent in learning unknown vocabulary from aural input. When students cannot decode the unknown word, the word is skipped, and if that word is a key word, the message will be only partially understood. Therefore, Internet dictionaries can assist the students in a way that conventional dictionaries cannot offer since the certainty of what is heard can be checked by the actual result of the dictionary search, i.e. the message of no-word-found could mean that the learner misspelled the word and then can try again with a different spelling. This is what happened in session 2 where student C typed various possibilities, the last one being part of the actual word *stream* and the dictionary sent different words with that beginning including the one that student C was trying to identify, which he managed to recognise and to read its definition. The student, of course, has to make the effort on his part in order to assess then if the word suggested by the dictionary is the one that fits in the context of the text. Student C in the same session confused *scheme* for *skim* and after reading the definition of *skim* realised that the word was not the one referred to in the text.

The reason why in the Radio and the Television sections of the sessions students consulted more words from the questions could be that students used the questions as the visual reference for the decoding and interpretation of the aural text. They therefore needed to understand clearly all the words as these could reveal what they were hearing when listening to the texts. As student G mentioned in the retrospective questions of session 2, radio section:

- Did the statements help you to understand the text better?

  "**St G**: Yes, quite a lot, because when I read the statement more or less...that is to say, I understand it better. First I read the question and then I played the piece of extract to find the answer. I have done it one by one relating them to the text.
  Tutor: This then has helped you to...
  St G: ...to get the message or to check if it actually was saying what the statement said. First I caught the general idea and then a bit more specific. For instance I would have never caught *Rehabilitation of Addicted Prisoners' Trust* but once you have read that you realise that they are saying so because they usually say these things very quickly."

6.2.2 HOW MANY TIMES: MONOLINGUAL / BILINGUAL

The following Table 6.11 shows that the bilingual dictionary with a mean of 13.86 was used more often than the monolingual with a mean of 7.95.

	N	*Range*	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
Monolingual TOTAL	22	24	0	24	7.9545	7.2208
Bilingual TOTAL	22	61	0	61	13.8636	18,4140
Dictionary TOTAL	22	59	2	61	21.8181	16,8625

Table 6.11: Descriptive statistics of Monolingual and Bilingual dictionary use

However, if we analyse graph GD2 in Appendix C (p. xxxvii), we can observe that students' look-up preference for one or the other was varied: 7 students preferred to use only the monolingual in the four sessions, 5 students only used the bilingual and the rest (10 students) used both dictionaries, 6 of whom used the monolingual more often than the bilingual and 4 students the other way round. Thus, although the totals of look-up times favour the bilingual

dictionary, we could actually observe in the following Table 6.12 that that there were 13 students who preferred to use the monolingual to 9 students who preferred the bilingual.

Type of dictionary use	No of sts	Students
Monolingual Only	7	H / I / J / K / P / Q / R
Both: Monolingual preference	6	A / E / L / N / U / V
Bilingual Only	5	D / G / M / S / T
Both: Bilingual preference	4	B / C / F / O

Table 6.12: Preferences for Monolingual and Bilingual dictionary

One reason for students using both options was determined by downloading problems of the dictionaries since they could not access the Internet site. For instance, student A reported her preference for monolingual dictionaries but she had to use the bilingual in the newspaper section of session 1 since the monolingual dictionary was not downloading. Other cases similar to this one with the shift of dictionary during the task due to inaccessibility were the following:

St	Session	Section	Dictionary shift
B	2	Radio	M ⇒ B
B	2	Newspaper	B ⇒ B
I	2	Radio	M ⇒ M
L	2	Radio	M ⇒ M

Table 6.12a: Dictionary shift for technical problems

We should point out that most dictionary shifts in this case were actually done within the same dictionary type. Inaccessibility was a real problem for students D in session 1 and student K in session 2 in the newspaper section and student Q in session 3, as they did have technical problems because the dictionaries did not download. Student Q, in the newspaper section, even had to resort to his pocket dictionary.

A related problem was the speed of access which also affected dictionary shift. When definitions took time to download, students shifted the dictionary. Sometimes students had reasons for changing since after several tries the definition did not download but sometimes the individual level of patience to wait for a definition had an influence in the changing. Some learners when they thought it was taking longer than their liking, got impatient and changed dictionary.

St	Session	Section	Dictionary shift
C	2	Newspaper	B ⇒ B
F	2	Radio	B ⇒ M
H	2	Radio	M ⇒ M
L	2	Newspaper	M ⇒ M
O	3	Television	B ⇒ B ⇒ M
R	3	Newspaper	M ⇒ M
U	2	Radio	M ⇒ M

Table 6.12b: Dictionary shift due to slow speed of access

This reveals an important factor in the use of Internet dictionaries: choice of one option or other could be determined by the degree and speed of accessibility of their Internet sites and thus also dependent on the time of day when we access the dictionary. All these variables could also influence the choice of dictionary at any point during the working session.

Another reason for changing dictionary was that the word or definition was not included in that particular dictionary so students tried to find it in another one.

St	Session	Section	Dictionary shift
B	2	Newspaper	B ⇒ B
C	3	Newspaper	B ⇒ B
D	3	Newspaper	B ⇒ B
F	3	Newspaper	B ⇒ B (twice)
G	1	Newspaper	B ⇒ B
L	2	Radio	M ⇒ M
L	3	Television	B ⇒ B
O	4	Television	M ⇒ B
M	2	Radio	B ⇒ B
T	2	Radio	B ⇒ B
U	3	Newspaper	M ⇒ B (twice)

Table 6.12c: Dictionary shift due to word not included

However, in most of these cases the shift was within the same dictionary type. This problem occurred mainly with the *Langenscheidt dictionary*, as described in Chapter 4, point 4.6.1, since it was a limited edition in which long entries were restricted to a maximum of 2,048 characters. Therefore learners changed from this bilingual dictionary to the other to find the entry they were trying to look up.

In session 4 television section student O changed from monolingual to bilingual since the first dictionary did not include the entry: *heckler*. He was really surprised to find out that the

word was included in the bilingual. He commented: "I don't understand how come a bilingual dictionary includes it but a monolingual dictionary doesn't." Students have preconceived ideas that monolingual dictionaries cover a wider range of words than bilingual, but it was not the case with the Internet dictionaries consulted (Newbury House and VOX).

At other times dictionaries could not find the word because students typed it wrongly or left a space at the end of the word which in the case of VOX dictionary always returned a not-found message:

St	Session	Section	Dictionary shift
C	1	Radio	M ⇒ B
E	2	Radio	M ⇒ M
F	2	Radio	B ⇒ B
F	4	Newspaper	B ⇒ M ⇒ B
O	2	Radio	B ⇒ B ⇒ M
O	2	Radio	B ⇒ B ⇒ M
O	4	Television	M ⇒ B
T	2	Radio	B ⇒ B
V	4	Television	M ⇒ M
V	4	Television	M ⇒ M ⇒ B

Table 6.12d: Dictionary shift due to spelling typing discordances

We included in the previous table students who typed British spellings and the Dictionaries preferred American ones. That fact in some cases forced the change of dictionary.

Another reason for changing dictionaries was due to lack of understanding the definition provided:

St	Session	Section	Dictionary shift
B	2	Newspaper	B ⇒ M
E	3	Newspaper	M ⇒ B
L	4	Television	M ⇒ B
O	3	Newspaper	M ⇒ B

Table 6.12e: Dictionary shift due to lack of understanding

The final reason identified for the shifting of dictionaries was that the learners were not convinced by the definition the dictionary provided or that definition was not appropriate for the context of the text. Thus they tried to check other definitions in a different dictionary.

St	Session	Section	Dictionary shift
A	2	Newspaper	M ⇒ B
G	2	Radio	B ⇒ B
O	3	Newspaper	B ⇒ M
U	3	Newspaper	M ⇒ B

Table 6.12f: Dictionary shift due to clarity of definition

We should mention that student O in session 3, newspaper section, even had two dictionaries one monolingual and the other bilingual running at the same time in two separate windows, and he was shifting between the two.

There are 4 instances where no clear reason has been identified although there is some indication that makes us think that students shifted back to their preferred type of dictionary after they had shifted previously due to some of the reasons mentioned above.

St	Session	Section	Dictionary shift
C	4	Television	M ⇒ B
O	3	Newspaper	M ⇒ B
L	3	Television	M ⇒ B
U	3	Newspaper	B ⇒ M

Table 6.12g: No clear reason for dictionary shift

Preference for one or another was mainly determined by students' normal routine. All of the students reported they were used to the same type of dictionary as the one mostly used in the sessions. Students had clear ideas and opinions about the use of certain types of dictionary. Students who preferred the monolingual argued that they preferred to have the definition in English for practice reasons. Even students who preferred the bilingual argued that probably it is better to use a monolingual dictionary. Student S mentioned:

> **St S**: "Theoretically, for what teachers tell you, the more you practise the more you learn...Then if you have a definition in the second language, it means that you can acquire it better...it's another way to get practice. The thing is that it is a little bit of a bore/struggle to use the monolingual because you can find a couple of unknown words in the definition and then you get unmotivated...so it's quicker in the end to use the bilingual"

This argument of being faster when using the bilingual just in the case the definition is not understood was also reported by students F, G, T and O. The latter added that he had never used a monolingual dictionary before:

> **St O**: "I don't have one. I suppose it is a question of getting used to...Well, it depends on how it is explained I don't know but if you have encountered an unknown word and the dictionary gives you a definition where there are words that you may not understand, then the problem gets worse"

Student O did use the monolinguals in successive sessions. Another student who had never used one before was student E who in session 2 experimented using both monolinguals and had a positive experience. Student K, in session 3 used the monolingual as opposed to what she normally does since she had the chance in the program to use it. In most cases, however, students used the dictionary they were familiar with.

Another interesting aspect shown in the data is that there were two students: D and P, who reported using both dictionaries in different situations:

> **St D**: "...if it's a word that I haven't a clue, I use the bilingual and if it's a word that I have some idea or to confirm I then use the monolingual."
>
> **St P**: "when there is a word that I have an idea but I don't know how to use it then I prefer the monolingual since it usually tells you how to use it. If I don't know the word I usually use the bilingual"

To sum up, students had the free choice of using either type which resulted in feeling more comfortable in their working since the program could suit their needs in terms of the type of dictionary they were used to, or give the chance to experiment with new possibilities assessing the benefits or disadvantages of using another type of dictionary.

6.2.3 WHAT: WORDS LOOKED UP

From the data that describe the use of dictionary included in the **ImPRESSions** DATA Disk we have drawn up Tables D10 in Appendix C which set out the words that were looked up from the newspaper articles and the radio and television texts. They are ordered by the number of students who looked them up and their relation to the questions are also indicated. This classification states how much attention students paid to individual words in relation to the reading goal, which was to answer the questions. Thus we may expect that students are more likely to look up the meaning of words which are relevant (in terms of their relation to the questions) than the irrelevant ones.

This concept of relevancy is not easy to pinpoint as it has multiple facets since different people can see different relations which could help to answer the questions. In order to determine the relevancy of the words, we gave the texts and questions to three teachers of English (1 native and 2 non-native speakers) who were asked to indicate if the words highlighted in the texts were related to the questions in terms of answering them correctly. Words from the texts, which also appeared in the questions, and the ones from the questions were obviously classified as relevant since students need to understand all the words from the questions in order to answer them. Therefore, the relevancy factor is only considered for the words from the texts.

Words were then labelled in three categories: *Directly relevant* (DR), when each of the three teachers agreed that they were related to the questions. *Indirectly relevant* (IR), when there was not agreement but at least one of the teachers pointed out some relation to the questions, and *Non-relevant* (NO) when the three teachers agreed that there was no relation to any of the questions posed. Operationalising the relevance factor in that way we are increasing the reliability of the word classification.

The type of words which were looked up more often from the newspaper articles in the four sessions varied but in general terms students logically tended to look up more relevant (R) words, either DR or IR, as summarised in the following table:

Newspaper articles	Relevant words looked up most often (more than 5 students)	Non-Relevant words looked up most often
Session 1	drawn up (10), bolster (9), avert (6) , overspending (5).	wheeze (6)
Session 2	brothel (10) fund/funding (7) , lack (6)	burgeoning (10), deal with (5)
Session 3	tackle (11), recruit/recruitment (10) , hail (9), workload (5)	boost (9), nought (6)
Session 4	strengthen (7), goad (6)	barracked (8)

Table 6.13

There are, however, some peculiarities which we want to point out. In session 2 and 4 students read the newspaper article as Second Encounter and thus they had the choice of deciding to read the text or the questions first. Most learners chose to read the text first as shown in Tables D3 and D5 in Appendix C. That fact may have determined that words such as *burgeoning* in Session 2 and *barracked* in Session 4 which are not relevant for the questions, were looked up the most often, since students approached the task from the perspective that they wanted to understand the texts regardless of the questions. Coincidentally, those two words appear early in the text, the former in the photo caption before the headline, the latter in the headline of the article (for details, refer to articles in Appendix B). The fact that they are at the beginning may have prompted students to look them up since at that point in the reading one still has partial understanding of the text and it is also a way to start obtaining a more detailed picture of what the article is about. We have noticed in most cases a tendency to look up more words from the beginning of the texts and less words when students are advancing in their reading of the articles. Of course this could be also due to a factor of tiredness in the case of some students looking up many words, as is the case of student T in session 3: "What happens is that there are so many unknown words that at the end you get tired, and while you are advancing in the reading of the text, every time you look up less words...otherwise I would be here till nine at night looking up words [...]".

Another influential factor that may have prompted students to look up those two irrelevant words quite often is that they appear in the text twice. Thus some learners may have tried to infer them, successfully or unsuccessfully, or simply skipped them the first time they encountered them, but as they appear later on students might have wanted to know exactly their meaning since their repeated appearance could indicate that the words are somehow important in the understanding of the text.

This is demonstrated in the way student L talks about the word *avert* in session 1: "I considered that one important...I finished reading the sentence and it came up again in the following paragraph...and then I thought that it was...I had tried to guess what it was but I didn't manage so I kept on reading and then I saw it again in the following paragraph and I tried to guess it again ...and then I decided to look it up."

Conversely, they had more chances to infer those words as they appeared twice in the text. The level of inferability is therefore an important factor to take into account since a word which can be easily inferred is less likely to be looked up. However, the level of inferability is dependent on each individual vocabulary repertoire and linguistic level and therefore difficult to pinpoint in the present study because we did not operationalise the concept prior to the sessions with the students. This factor has not been considered in the present study as the approach was more holistic in nature, but it should be taken into account in more specific studies of dictionary use and language learning strategies.

In sessions 2 and 4 most students tended to read the text first before the detailed comprehension questions which implies that students were more likely to look up a higher number of irrelevant words than the ones in sessions 1 and 3 where most students chose to read the detailed comprehension questions first. In session 2, table D3, we can observe that ten students looked up words before the questions, the highest number of students in the four sessions whereas in session 4 only four students did. However, 18 of the 29 words looked up before the questions in session 2 were relevant to the questions which obviously helped them in their subsequent answering task where fewer words (15) were then looked up. In contrast, in session 4 (see table D5) only 4 students looked up words, most of them irrelevant, before doing the questions. The majority of look-ups was performed when students were doing the questions and therefore students looked up more relevant words (33) than irrelevant ones (20). A clear exception is student G who looked up nine irrelevant words as opposed to six relevant ones even though she was answering the questions while reading the article. Clearly, student G approached the tasks in all the sessions in more or less the same way: she needed to have clear and detailed understanding of all the words, regardless of their relation to the questions, in order to perform well in the task. We should remember that student G is the highest "consultor" of the sample.

There were two other students who looked up more irrelevant words than relevant but this happened in session 3 (Table D4 in Appendix C). Student O looked up 10 irrelevant words as

opposed to 2 relevant ones, but that it is understandable since he chose to reread the text in detail after the general comprehension question and before the detailed comprehension questions, therefore he concentrated on the reading rather than the specific sentences or paragraphs in relation to the exercise. In contrast, student C consulted more words unrelated to the questions, (8 non-relevant words), even though he was working with them. However, he did not finish reading the questions, he only read to question 3, when he decided to look up the words he had already jotted down and so he was not relating them to the questions. He approached the looking-up task in one go, i.e. he looked up the majority of the unknown words one after another. We describe his look-up process in more detail in point 6.2.5 below.

With regard to the Radio and TV, the majority of words were looked up from the questions (see Tables 10 in Appendix C) but the ones from the texts were mainly relevant to the exercises with the exception of session 1. However, the number of words in that session is not significant to draw any conclusion. Session 1, as mentioned elsewhere, is an exception.

Some of the words were repeated in two texts in different sessions and although some students acknowledged that fact, they still had problems since they did not remember the meaning from the first look-up. We observed, for instance, that student B looked up the word *take over* in session 2 radio, session 3 television, and session 4 television; and student T looked up *take up* in session 2 radio and session 3 television. The level of memory retention of these students probably is low or they may have not paid much attention in the first place. In any case, retention of words occurs when learners have encountered the word many times and not simply twice or three times.

Some students did have problems with these repeated words - such as student J with the phrasal verb *draw up* in session 1 and 2 - but in all of these cases those students decided not to look them up and tried to guess them in context. For instance, student P mentioned the following, talking about the word *boost* in session 3, newspaper section:

> **"St P**: *boost* already came up the other day, I think, in the first session, wasn't it?. So, let's see,... I understand what the sentence means but I do not know what the word exactly means.
> **Tutor**: What did you do then?
> **St P**: I kept on reading. Well, it draws your attention because the other day I saw the same word, ...probably the other day I had more problems to guess it."

Surprisingly nine students looked up the word *boost* in session 3 which in this case was non-relevant to the questions, but only one student did in session 1 when that word was relevant for the questions in that session. Again, we must point out the exceptionality of session 1 as it

was the students' first encounter with the program. However, it could have been due to the fact that the word *boost* was in the headline in the article of session 1 and thus the meaning was explained later on in the main text of the article so then most students had no need to look it up.

Students sometimes had clear ideas in their minds if a word was relevant to the question and then they behaved accordingly, as, for example, student B shows when commenting on some unknown words in session 2, newspaper:

> "**Tutor**: Did you try to guess them?
> **St B**: sometimes,...but sometimes when I saw that the question did not refer to that, I skipped all the sente...Well I skim read the sentence... It hasn't got anything to do with the question, let's then leave it and concentrate on doing the exercise."

Likewise student T talked about what she did with the unknown words in session 1: "I have looked up some words, ...since they had some relation to the question, for instance, *avert*, ...and I tried to guess others."

At other times, the relevance was related to the understanding of the paragraph. Student A in session 3, newspaper section talked about the word *spearheads*:

> "**St A**: I have jotted it down but I did nothing with it...till the end that I looked at my notes and realised I hadn't looked it up. I then went to see if it was relevant but as I saw that I didn't need it to understand the paragraph, in the end I didn't look it up."

Therefore, most students were quite selective in their look-up behaviour trying to restrict to relevant words either for the questions or their own understanding of the text. Some students even underlined the fact that looking up every single word, either relevant or irrelevant, breaks the flow of reading. As student K commented in session 3:

> "**St K**: [...] in my opinion, I think that to look up all the words does not help you understand the text since you have to go back every time to fit the word in the context...and therefore, ...you go and look up the words that are relevant, otherwise I get bored reading the text."

Sometimes, however, students were not that selective and looked up every word they did not understand from a paragraph, as student D, for instance in session 3 newspaper, commented in the retrospective interview:

"**Tutor**: any other word that you have looked up?
St D: (*looking at her notes*) *be aware of*...that was in my subconscious memory but....and *harsh*.
Tutor: do you think that *harsh* is a relevant word to look up?
St D: mhmmm...it came up a couple of times...I don't know if I looked up *harsh* first or *aware*.
Tutor: *harsh*.
St D: Then I would say no...looking up one of the two was enough...it was more for curiosity than anything else but as I did not have a clue about what *harsh* was I looked it up first."

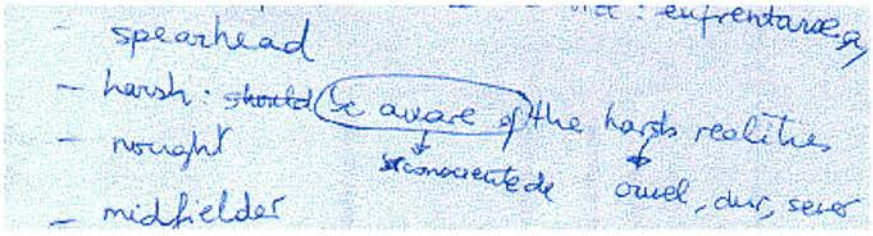


Figure 6.1 Extract from student D's notes session 3 newspaper

In this case, curiosity was the prompter to look up the word, regardless of its relevancy to performing the exercise. We should also point out that in this case the student's perception was a little bit confusing since the word *harsh* only appears in the article once and besides, she did not remember the order of her look-ups. This last fact is not so important but it reveals that some students did not actually remember or were not at all conscious of what they actually did in terms of strategies to infer meaning of words or even at the more concrete level of using the dictionary. It is true that learners are aware of using those strategies but sometimes they cannot spell out exactly which ones they used since they work at the unconscious level. For instance, student P mentions:

"**St P**: [...] I always try to relate the word...I do it unconsciously. That word, for instance, ...I didn't manage to relate it to anything. I usually read the sentence and if I think I understand it, I keep on reading. I always try to relate it to anything I already know, from another language or even English, that is probably what I do first, and then I go back to the sentence to see if I can infer it from the context. Those are things you do but you are not quite conscious about them, you do them automatically."

As is seen in this example, different strategies were followed by students to compensate for lack of understanding a word. In the next section we describe the language learning strategies that learners reported to use in order to compensate for their linguistic limitations, apart from using the dictionary.

6.2.4 WHAT: COMPENSATION STRATEGIES

In the semi-structured interview after students worked on each text, they were asked some questions about specific vocabulary. We wanted to find out which inferring strategies students deployed to compensate for not knowing specific words. Comparison among students then is not relevant here since each individual learner behaved differently. Questions in that respect were individualised depending on their specific look-up behaviours. However, the same type of words was pointed out to them considering their relation to the questions, or lack of it. In other words, we asked students about relevant and irrelevant words to find out how they compensated or if they did at all.

From the retrospective questions Table 6.14 illustrates the compensation strategies students reported using instead of looking words up in the dictionary. In asking students specific vocabulary to retrieve varied strategies, we pointed out to students words which were relevant, words which were irrelevant, words that prompted the use of one strategy over the other, such as *workload,* which is likely to prompt splitting the word and analysing its parts more than any other strategy. Therefore, we tried to ask learners a range of words where they may have used various strategies. The number of times students reported using them is indicated to see which strategies students used more often and if they were successful in their guesses.

Inferring strategies	Managed to guess it	Didn't manage to guess it	Total
Context	116	106	222
Similarity to L1 (Catalan or Spanish)	24	18	42
Analysis of parts of the word	20	19	39
Relating word to previous news item in same session	18	1	19
Previous knowledge of word with other meaning	7	10	17
Analyse grammatical function of word or grammar of sentence	3	5	8
Similarity to another word in English	0	8	8
Background knowledge	4	3	7
Relating it to news item of previous session	2	1	3
Similarity to another foreign language	1	1	2
Punctuation	2	0	2
Pronunciation of word	1	0	1
Skipped / omitted / avoided		145	

Table 6.14

This table does not include inferring strategies that students used before they decided to look up the words in the dictionary. Some students did not go directly to the dictionary but tried to guess the word first, then wanted to check if their guesses were right, or simply they did not manage to reach any firm conclusion about the meaning of a word and then decided to look it up. For instance student A in session 4, talking about the phrasal verb, *bring about,* explained: "I interpreted it in another way...and I went to look it up to be sure about what I guessed...I don't know, first I interpreted as *to clarify*...and the dictionary solved it, it gave me what it actually meant."

Table 6.14 above illustrates that using the context is the inferring strategy most frequently reported:

> "**St E**: I read the sentence twice...and I managed to understand it, although I don't know the meaning of the word, I understand the sentence...in context."

However, the most surprising feature of these figures is that although most students were successful in guessing words from the context, there is a large number of instances when they did not manage to guess them. This obviously calls for reflection, in that learners use that strategy sometimes thinking that they are successfully interpreting the word but in reality they are not and do not check or confirm their guesses. We can see that they are using a variety of inferring strategies but are they really successful in their guessing? In that respect we can point out that there are students whose percentage of guessing words is higher than others. For instance, if we analyse closely the retrospective questions about vocabulary between student J and student I (**ImPRESSions** DATA DISK, folder: *Retrospective Questions*) we can certainly assert that student J guessed more words from context than student I, who in some cases made up incredible definitions that had no relation whatsoever to the context where the words were. One instance of this happened in session 2:

> "**Tutor**: Do you know *lack of funding*?
> **St I**: I thought it was "luck" or the ability to find it, to find any initiative.
> **Tutor**: Did these fit in the context of the text?
> **St I:** Yes."

Probably student I was mixing up words, *luck* for *lack*, *finding* for *funding*. However, the important factor here is that he did not have the ability to realise that these had nothing to do with the actual context of the text. In that respect, student J was more successful in his comprehension of the texts, whereas although student I used this strategy and others, he was

not aware of his lack of success. Therefore, student I would need to take a step further and try to confirm his guesses, otherwise he will never manage to improve that strategy, nor therefore his reading comprehension.

Student C, for instance, behaved in a way at the other extreme. He consulted the dictionary quite often as he did not trust his inferences. Perhaps the experience student C had with his inferring strategy had not been a successful one, and thus he has reverted to trusting the dictionary more than his ability to infer in order to solve vocabulary problems. He may have not had much experience or training in how to infer words in context, which is reflected in his high frequency use of the dictionary. What we want to stress here is the importance of the effectiveness of using that strategy. Students use the context to infer meanings but they probably need more tools to improve that strategy or simply combine it with other inferring strategies. In line with this, student G in session 4 had a similar attitude:

> "**Tutor**: you looked up, *barracked, jostle, jeer, rough, smooth*... Why?
> **St G**: to find out about what happened with the loyalists. From the TV news item I already had an idea, more or less...when I looked them up I knew about it...but I did it to confirm, to be sure about it."

For some students that was the only way to operate since their level of confidence in their guesses was probably quite low or they simply needed to be assured of what they were guessing.

It is also true that sometimes the context does not help much in the understanding of a word, as for instance, in the following sentence of the newspaper article in session 2: "Mr Hellawell, 55, who has hit the headlines with ideas such as legalising *brothels*, said he welcomed discussions about soft drugs". Most of the students who did not look up *brothels* thought it referred to some sort of drug, and even the students who did look it up, were really surprised when they got the definition. The context in that respect was not helpful. Examples such as this one may help teachers to make students aware that using the context is a useful strategy but should be complemented with other inferring procedures.

Most of the time when students did not manage to guess the word in context, they skipped it and kept on reading without confirming; other times, though, as in the example of student A or G, in session 4 above, they did check the dictionary.

The second most often reported strategy was to skip the word. For instance:

> "**Tutor**: What did you do with *draw up*?
> **St B**: I skipped it…I didn't know it …but with the rest of the sentence I had enough. I did nothing."

Or student Q in session 3:

> "**Tutor**: What did you do in the first sentence, for instance, did you know *hailed*?
> **St Q**: No…I skipped it.
> **Tutor**: *Backed*?
> **St Q**: No…I skipped it.
> **Tutor**: and *boost*?
> **St Q**: No…I skipped it.
> **Tutor**: When you say: "I skipped it" you mean that you kept on reading or tried to understand it in context?
> **St Q**: I've tried to understand it in context…that is to say, the whole paragraph, …I tried to guess those three words but I did not manage."

As we observe in the last example, even students who stated that they skipped words, always tried to somehow guess the word from the context or at least tried to obtain the general meaning of the paragraph where the words were, even if they did not apply any conscious inferring strategy.

Students mostly reported skipping words when they thought the words were not relevant for their understanding. However, in some cases the skipped words were not only relevant for understanding the text but also directly related to the questions, as for instance, Student V in session 3, newspaper:

> "**Tutor**: *tackle*?
> **St V**: It sounds familiar but I couldn't tell you what it means.
> **Tutor**: What did you do then?
> **St V**: Nothing…I thought of looking it up but I kept on reading.
> […]
> **Tutor**: *tackle* appears here again.
> **St V**: I have skipped it again."

The ability to identify the key words is another feature to take into account in the learners' process of improving their reading comprehension. We observed that Higher attainers had more ability in identifying those words than Lower attainers in most of the instances, although we should point out that this assessment is only impressionistic.

Skipping words is a strategy that all learners used at some point in their reading tasks and thus it had direct implications on the level of understanding of a text. Sometimes it is a good strategy to follow, as in the case of student H in session 2:

"**Tutor**: any other word?
St H: *Burgeoning*, but I didn't look it up because it must be a determiner, therefore I can omit it. I've had enough with the noun 'problem'."

The analysis of the grammar also helped the student to decide that the word was not that important to understand the text and acted accordingly. In this case student H used an inferring strategy to analyse its relevance and then decided to skip it. An important feature for further research could be to identify the number of skipped words that are relevant to understanding the text and how much or little skipping or omitting them affects the level of understanding the text. In the present study, we simply identified that there was a variety of skipped words, some of which were related to the questions and some of which did not relate.

Obviously most of the time several inferring strategies occurred at the same time or in combination, or interacted in one way or another. This is not shown in table 6.14 where the reported strategies were tallied separately, but we have already seen that feature in the examples presented. One clear example, for instance, is what student K did in session 3, newspaper:

"**Tutor**: What about *harsh*?
St K: this...I immediately saw that I didn't know it but I thought it said...well, that the reality was bad. Moreover, as the word sounds a little bit strong, I thought it could be this, and of course, from the context. They are criticising what it is like so they are not going to say it is wonderful."

We should note that this is the only case where a student relied on the pronunciation, the sound of the word, to help her guess its meaning.

One of the assumptions that we should not fall into is that all the words can be easily inferred in the same way. Therefore, there are some words such as *overspending* which would logically be easier to guess it by splitting its parts, or *infuriated*, for which searching for L1 similarity, in our case Spanish or Catalan, would be easier. This is one of the reasons we tried to provide questions about different types of words in the interview to prompt different ways of inferring. Here follows an excellent example of the strategy variation by student E in session 3:

"**Tutor**: *slick*, what did you do? Did you look it up?
St E: Yes, but now I don't remember what it means.
Tutor: and *nought*? What did you do?
St E: Nothing. I kept on reading.
Tutor: and *workload*?
St E: No, but more or less, I know what it means, *carga de trabajo* (= *workload*).

Tutor: Did you guess it?
St E: Yes.
Tutor: How did you guess it?
St E: I guessed it dividing *work* and *load.*
Tutor: Did you do it quickly or unconsciously?
St E: Well, not that quickly, in fact.
Tutor: Why?
St E: Because, I had in mind another word, *overworked*, and I thought that this word would have been the perfect one for that context but...well, I had doubts if this one was the same."

All the words mentioned in this extract of conversation are included in only one paragraph of the article. It is fascinating the variety of strategies student E deployed in only one paragraph. Each strategy is dependent on the actual word and the possibilities the word has to be inferred either in the context or the word in itself. Student E is not an exception, as the majority of students showed a varied range of strategies depending on what type of word they were dealing with.

Most students at one point or another in the sessions used L1 to infer an unknown word, with a similar total of correct guesses (24) and failures (18) However, in this study the favoured strategy for students was to infer the correct meaning. The following are two of the multiple examples from the data, the first one in which the student managed to guess the meaning and the second in which she didn't.

1 "**Tutor**: *civilities*?
St H: I guessed it ...it is similar to Spanish, *civilizado*."

2 "**Tutor**: *relentless*?
St N: every time less, isn't it?
Tutor: how did you guess it?
St N: I don't know, through the word, relent sound like "slow" (= *lent* in Catalan), and less means "minus", so every time less reforms [...]."

The last example is a clear indication of the dangers of *false friends* when applying the L1 similarity strategy. Some learners acknowledged that problem, as student M mentioned in session 1: "if there are similarities in Catalan or Spanish you soon assimilate it, I imagine it happens unconsciously...sometimes you guess them wrongly due to those *false friends*, that is to say, that you associate words wrongly".

The problem with similar words is that students tended not to confirm their guesses as the similarity to the L1 makes them sometimes too confident that the meaning is the appropriate

one. A curious strategy in relation to that is the one reported by student B in session 4, talking about the word *goaded*:

> "**St B**: I have looked it up... Yes, because "*infuriated*" seems to me very angry, isn't it? But I thought I was not sure about it, then if I had to look up either of them, I thought to looked up *goaded* and if the dictionary confirmed that it was the same then I trusted my guesses of "very angry" and only consulted one word."

It is clear that student B had processed these thoughts in order to economise on time and effort but at the same time, he is processing different strategies such as the fact that both words are joined with the conjunction *and* so he can infer they have similar meanings. At the same time, he is prioritising which word to look up which could help to kill two birds with one stone: find out the meaning of one word and confirm the guess of the other due to L1 similarity.

Another strategy students reported in order to infer the meaning is the similarity to other words in other languages such as French in the case of student P with the word *tackle*:

> " **St P**: it has reminded me of a French word, *taquiner (teasing)* that if I remember well means to be aggressive in the sense of being inquisitive...but not in a negative sense. Then I thought in the game, in the playground...I don't know, be aggressive but not in the negative sense. Not to be afraid or something like that."

Or German in the case of Student M and the verb *back*:

> "**St S**: I guessed it ...well, *bake* is to cook bread, isn't it? I mean that it's like *prepare*, or something like that or...that he assigned so much money to help...
> **Tutor**: How did you guess it?
> **St M**: from the German, *backen*, (to cook bread)."

We can see that the strategy was not successful in the second example, as the similarity was too far away from the actual context, since the student transferred the word wrongly, stretching the imagination. Student M continued saying: "You must think that this is ridiculous! (*laughs*)"

Some students also used similarities with other words in English, as is the case of student G in session 4:

> "**Tutor**: What did you do with *seize*?
> **St G**: I guessed what it was...to value, to rate.
> **Tutor**: Did you guess it from context?
> **St G**: No, to me it sounded like *size*...and then I interpreted as *to value* or *to measure*."

The confusion of words, due to similar spelling, did not help in applying that strategy. In all the cases reported using it (8 cases, see Table 6.14 above), students confused the spelling of the words or they found a similarity in pronunciation, such as *expel* for *spell*[1]. However, in other instances when there was no confusion, students used their knowledge of the English word in another sense to reach the desired meaning, as did student J in session 2 with the phrasal verb *draw up*:

> "**St J**: [...] when I was reading I thought, *draw up* must be more or less like *draw*... but here in this sentence: ...(*reads aloud*) "the national strategy for dealing..." I thought it was to carry out a plan.
> **Tutor**: did you guess it then or you are doing it now?
> **St J**: Now more than before (*laughs*)."

The last example also illustrates an important issue identified in the retrospective questions. When students were asked about what they did when reading the text or doing the task, they could not recollect exactly what they actually did and thus they performed a sort of replay of what happened when they first read the text. The problem with that repeated performance is that sometimes they were using a different strategy from the one that they used in the first instance, as illustrated in the example above. Still, most of the learners were honest enough to recognise that they were using that particular strategy at the moment in the retrospective questions, but had done something different when they were reading the text. We can then assert that the retrospective questions helped them recognise features and strategies which otherwise may have remained in their unconscious.

Other times using the English word from another context did not help at all. This is what happened with the word *spell.* Various students knew the word but with a different meaning:

> "**St L**: I already knew the word...from spelling, isn't it?
> **Tutor**: and did you understand the paragraph?
> **St L**: No, ...it refers to that man...the importance of where he has been...I got the general meaning, besides no question referred to this."

Spell in the article referred to " a period of time" but as the article was about teaching some students were convinced that it referred to spelling words, spelling lesson or similar. The context here did not assist the learner in working out that the word possibly had another meaning. One aspect we noticed is that when students had a fixed or preconceived idea of something then it was very hard for them to think of other possibilities, even when it was suggested to them in the post-task interview that the contrary was the case.

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[1] Note that Spanish speakers tend to pronounce /e/ before an initial /s/ + consonant.

Some learners used their background knowledge in other fields or in other contexts to try to infer the unknown word. Student H, for instance, mentioned that he tried to associate the word *back up* to computing but it did not help him since the context was different.

Considering the grammar of the sentence or the function of the unknown word was also reported but to a much lesser extent. Student D used this strategy in Session 2:

> "**Tutor**: What about *chair*?
> **St D**: I think that then I thought it was a noun to define a post within that Cabinet. I guessed it was a post and then I kept on reading.
> **Tutor**: did you read the sentence again?
> **St D**: Yes...I read it till I got here 'on drugs' (*paragraph 9*) and then I went back and started reading. I guessed it was a post and I kept on reading. This is that type of relative clauses that... I kept on reading."

Students who reported this strategy said that it helped them in identifying the relevance of the word in terms of its relation to the sentence but in most of the cases it did not help them to come up with the correct meaning as illustrated in Table 6.14, - 3 students managed but 5 did not.

As we can see in Table 6.14 above, the other strategies students reported using were less frequent. One example worth mentioning is the word *yell* in session 4 since two students used punctuation as a way of inferring the meaning:

> "**Tutor**: Did you know the word *yelled*?
> **St M**: No
> **Tutor**: What did you do then?
> **St M**: a different synonym of *shout.*
> **Tutor**: How did you guess it?
> **St M**: Because it says: a woman, **colon**...therefore it is *shout*."

Of course, she also used the context and the fact that she had already seen the TV news item where students could see that the woman is shouting at the Prime Minister. Some students used the same approach of using the TV images in order to identify the meaning of some words, as especially in session 4, newspaper:

> "**Tutor**: with *jostled* and *jeered*, what did you do?
> **St T**: nothing...I guessed them, as I already saw the images on television...so, people had jostled ...and insulted him ...well, I am sure that if I had not seen the images on the TV news I would have look them up, ... for sure."

However, sometimes the images caused students to become fixed with a wrong idea as student O, working on the newspaper article of session 4, interpreted the word *gloves* in the sentence "some wearing rubber *gloves*" as the *banners* the demonstrators were *carrying*[1].

In general terms, students reported a rich variety of inferencing strategies in the four sessions as we have illustrated in this point, some of them succeeded in their guessing and some did not. What matters as designers and teachers is to provide an environment where learners can use and develop those strategies. In that respect the decision not to include definitions by hypertext links may have prompted learners to use a wider range of strategies than might have been the case if students had had highlighted words to definitions. As student J states:

> "**St J**: [...] I can't use the dictionary because I know that if I don't use it, there are many words that I try to guess and I can infer. On the other hand, if I know that I have a dictionary then I don't do any mental exercise. That is to say, to try to guess and then...if I have doubts, I go directly to the dictionary, and I don't want to do this because the easiness of access to the dictionary later... (*meaning that is not beneficial*)"

Student J's comment reflects the typical learners' temptation to resort to any help available, in our case the dictionary, and not to consider effective alternatives that, in the long run, can be really beneficial, as it is the case of encouraging oneself to use more inferring strategies. However, we should also acknowledge that sometimes learners do not use the dictionary when they really needed it. The same student J in session 2, radio decided not to use the dictionary due to "laziness factor", and thus resorted to trusting his inferring strategies. That is to say, he felt that for just a few words it was not necessary to use the dictionary, even when the word was very relevant since it was included in the questions. He commented:

> "**St J**: I had problems with *take over*...that I didn't know and I did nothing [...] I guessed something different and of course, if you interpret the word with another meaning...then what they are asking is something completely different. That happened to me another time...but this time, I felt too lazy to download the dictionary for only one word...I understood the rest...and only for one word.."

The retrospective interview at least allowed students in some cases to be aware of why they did not succeed. We have identified that sometimes learners were oblivious to the fact that their strategy was not successful in terms of guessing the meaning of the word. In that sense, learners cannot improve in developing effective inferring strategies. There should be a way to

[1] Note that Spanish learners tend to confuse the verbs *carry* and *wear* as in Spanish the same word (*llevar*) is used.

make learners aware that sometimes to only use a strategy is not enough in order to be strategically competent but to know how to use the most adequate strategies at different moments.

We have not considered the SILL questionnaire here or the students' perceived compensation strategies use as an independent variable to describe learners' behaviour since the questionnaire only reflects the frequency aspect, but not the qualitative features that we have outlined in this point.

6.2.5 WHEN and HOW: ACCESS or CONSULTATION?

The data of *Dictionary use*, as far as reading the articles is concerned, reveal two main approaches to when students accessed the dictionary to look up the words. **Pattern A** is when students looked up the words when they encountered them on an individual basis, which also includes looking up two or three words consecutively if they belong to the same paragraph. Here follows an example of the behaviour of student A, in session 3 when she was reading paragraph 4 of the article:

	ON SCREEN	OFF SCREEN
	[...]	
	∇ moves mouse to p4	∇ reads tx p4
	∇ no mouse movement	
		St: *...I'm going to look up the definition of a word,...*
D	∇ clicks dict from taskbar ⇒ dict. window pops up (Newbury House Dictionary – def. of *hail* page New Search: Begin Search)	St: *..I think it's one thing and maybe it's another*
	∇ types *tackle* in New Search textarea	T: *what do you think it is?*
	∇ clicks Begin Search button & Sí button	St: *Ah..., hold on, that I forgot the context*
	∇ minimises dict. window [tx: 1-5 / qs:1-4]	
	∇ moves mouse to p4 & over *tackle*	St: *...well,... I don't know now...*
	∇ clicks dict from taskbar ⇒ dict. window pops up (Newbury House Dictionary – def. of *tackle* already downloaded) ∇ scrolls def. down **[tackle** *n.* **1.** [U]. equipment used in sport: *We take fishing tackle on camping trips.* **2.** [C] (in US football) knocking a player carrying the ball to the ground. *–v.* **–led, -ling, -les 1** (in Us football) to knock a ball carrier down: *A guard tackled the ball carrier.* **2** *fig.* To begin a job with a lot of energy: *I tackled the problem of lowering the company's costs.*]	
	∇ no mouse movement	∇ reads def. ∇ jots down [→ *knocking a player carrying the ball to the ground*] next to previous annotation [*to tackle*]
	∇ minimises dict. window [tx: 1-5 / qs:1-4]	
	∇ goes to qs	
	∇ scrolls qs down (2-5)	
	∇ no mouse movement	∇ reads q2 (checking her answer) ∇ reads tx ∇ reads q3 ∇ reads p2
	[...]	

Table 6.15 On-screen and off-screen actions[1] by student A looking up a word: *tackle.*

Student A encountered the word in paragraph 4 of the article and after thinking about it she decided to access the dictionary as she was not sure that what she guessed was the right thing. After checking the entry, she jotted down the most suitable definition for the context of the text and kept on doing the exercise: reading the questions and then the text.

[1] Description of the symbols included in this table is provided at the beginning of Appendix F

Pattern A basically was performed in two ways. The common one was that students read the whole sentence or paragraph containing the unknown word(s) and then looked them up in the dictionary. But it was also observed that some learners went to the dictionary to look up words without having finished reading the sentence or the paragraph. One clear example identified from the video-screen recordings was student D in session 4 newspaper in which after following what she was reading with the mouse pointer, she reached the word *blamed* and went straight to access the dictionary. This feature occurred other times and with other students but sometimes it was not reflected on the screen-recordings since those students did not tend to use the mouse pointer for following their reading, thus, it is difficult to demonstrate it scientifically. This reaction to go to the dictionary directly is a reflection of what happens in real life where learners go directly to find support without considering other possibilities. It resembles "a panic attack" reaction to not knowing and the learner promptly wants to soothe that stress by using the dictionary immediately.

All the students basically followed *Pattern A* when reading the article, with the exception of student C who in sessions 2, 3 and 4 approached the look-up task following *Pattern B*. **Pattern B**, is when students read the text, jotted down some words and then looked them up in one go, one after the other, and then kept on doing the task. Student C describes it as follows in session 3:

> "**St C**: To go faster, I first I jot down, I get the general ideas of the whole text, I directly write all the words that I don't…I am not sure of, and then I look them up, when I have all the definitions I go back to read the text."

An example is shown in Appendix F where a detailed description of on-screen moves and off-screen actions by student C in session 2 are included. He started looking up *deal (dealing)* and ended with *chief.* Of course, he also checked some words later on but his approached was basically Pattern B. One of the concerns from the teacher's perspective was that most of the times student C did not check the context as we can see in the example of Appendix F when he looked up, for instance, the first word, *dealing.* The fact that he chose the wrong definition may be due to multiple reasons, such as poor dictionary skills, not checking which grammatical function the word had, and of course, not checking the context. Otherwise he might have realised that in this case *dealing* does not mean *business.* He continued looking up *lack, forthcoming, burgeoning, rose (rise), brothels,* and *chief.* In all of these he didn't check the context of the word, and therefore his definitions were chosen somehow at random. In the observation, we realised that student C was basically choosing the first definition(s) of the entry. When student C was asked about this he responded as follows:

> "**Tutor**: do you usually read the first definition only?
> **St C**: Yes, ...well the first one, the general one.
> **Tutor**: What do you mean by the general one?
> **St C**: I believe that dictionaries....well, I've been told that dictionaries, the first definitions are the most relevant or the most commonly used. Therefore, the percentage of possibilities that the first one is the correct one is high.
> **Tutor**: and if it doesn't fit in the context, what do you do?
> **St C**: I check again...the problem is as it happened that sometimes even checking it I interpret it in the context"

One of several examples of student C's interpretations of a word, which illustrates his point, is the word *outline* from session 2 radio, where he got the first meaning and interpreted it as he wanted. Moreover, this example reveals that student C had a lack of dictionary skills since although he said he checked the context, he actually did not do this in most cases.

Other students also followed **Pattern B** not in their reading of the article but of the questions. Student S, for instance, in session 2 newspaper, read the questions, took notes and after that looked up the unknown words before starting to do the exercise. The same procedure was followed by student G in the TV section of session 4. Other students followed Pattern B after they had finished the exercise and went back to watch the TV item with subtitles or read the transcript. In those cases, they followed the written text and jotted down the words. Then they looked up the unknown words in one go. Student J followed that procedure after reading the transcript in session 4 and student L did the same after watching the TV news with subtitles. Pattern B, in the last case, seems a suitable approach since the listening task was not interrupted.

Another relevant aspect to consider about the when-question with regards to the use of Internet dictionary is the fact that there could be a gap between the access of the dictionary and the actual consultation of the entry. This feature is specific to Internet dictionaries and thus students showed different strategies in dealing with that issue. This is reflected in the grid of the *Dictionary Use* included in the DATA Disk where we described, for each word that students consulted, when they accessed the dictionary and began the search, and when they consulted the definition(s) that the dictionary downloaded.

If the definition downloaded immediately or after a few seconds, students usually checked the definition after it had downloaded. For instance, Student T always, except for one word, waited for the definition to download (see description in document *Student T D.doc* in folder *Dictionary use* in the DATA Disk). We must also say that fortunately she did not have any

technical problems with the Internet dictionary, hence she never modified her behaviour throughout the four sessions.

The problem was when students were waiting for the dictionary or a definition to download, and the dictionary was not responding or it was taking too long to send the reply. Most students minimised the dictionary window and continued working on the task. Some waited a certain amount of time, such as student K session 1 radio with the word: *resource*, and when he felt it was taking too long decided to minimise the dictionary window and kept on doing the task. An example can be found in the detailed description of Student A in session 2 Radio included in Appendix F.

Other students were less patient and when they thought the Internet dictionary was not operating to their liking they immediately changed the dictionary to another one which they considered faster, as did student L in session 2 (word: *funding*). Student B even mentioned in session 2: "[...] that is to say, it is more important for me the speed of the dictionary than if I use a monolingual or bilingual dictionary."

One obvious problem of that gap between beginning the word search and checking the definition is that the student's mind should have the ability to cope with the task of going back and forward in the reading process or the task process and in their thinking process as well. In that respect, there were students who coped perfectly well with that process, for instance student A in session 3, who reread the question that the word referred to while waiting for the definition to download. In that sense that lapse of time allowed student A thinking-time to retry using inferring strategies. Some learners, over the 4 sessions, even developed the strategy of immediately minimising the dictionary window after they had clicked the *Search* or *Look up* button in order to economise on time of interruption and to keep on working, checking the dictionary from time to time. To see a few examples, refer to student K in sessions 3 and 4, newspaper; student A in session 3, newspaper; or student N in session 3, newspaper, from the *Dictionary use* folder of the **ImPRESSions** DATA DISK.

Another student who had difficulties in terms of memory was student B in session 2 radio, who after searching for *appointment,* which related to the general question, continued reading the detailed questions, and when he went to look up another word, realised that he had the dictionary already running for a previous "forgotten" word. Also in session 3 this same student B went to look up *tackle* and forgot which word he had previously typed. This

instance is illustrated in the following table taken from the *Dictionary use* folder of the **ImPRESSions** DATA Disk.

Word	Where	Rel. to qs.	When access in task	Dict	When check definition	Read entry	Check context	Definition chosen	Why	Action after looking up	Tech Prob	Other Info
inspectors	Q (7)	Yes	Reading qs 1st time: after reading q7. Alt+TAB	Bilingual: VOX	While downloading, goes on reading qs (q8&9). After correcting spelling, reads text. Doing qs: after reading p4 to answer q2. St wants to look up *tackle*.	Reads 1st def	No	noun **1.** (gen.) inspector, -a, (on train) revisor, -a (in police) inspector, -a de policía.	??	Looks up *tackle*	No	Types *inspectors*. Dict doesn't find it. Erases –s- St doesn't remember what the dict. is downloading when st accesses it.
tackle	Text (p4)	DR	After looking up *inspectors*. Alt+TAB	Bilingual: VOX	While downloading, reads p4, highlights word on text.	Scan reads def. (4&5)	Yes Alt+TAB After answering q2 (realises of rugby def)	transitive verb **4.** (*deal with - problem*) abordar, encarar, (-*task*) emprender; (*person*) hablar con. **5.** [SP] (*football*) entrarle a, (*rugby*) placar.	Needs info	Goes to q2 & answers FALSE	No	Types *tackler*. Alt+TAB. Checks spelling. Erases –r In the end st chooses, *def 5*.

Table 6.16 Extract of Student B's look-ups in session 3.

In some cases it was not a question of coping with the task of going back and forward in the reading process but the interruptions that this Internet feature prompted in the flow of their working or thinking. Students had to keep reminding themselves that the dictionary was still searching for the word requested. Thus students had to check it, sometimes many times, to find out if the definition had downloaded. Student F, for instance, was searching for the phrasal verb, *take over*, and checked lots of times to see if the dictionary had downloaded the definition which interrupted her flow of working at the beginning, as illustrated in the following table 6.17 as a summary of her actions:

Word	Where	Rel. to qs.	When access in task	Dict	When check definition	Tech. Prob.	Other Info
take over (take)	Questions (3)	Yes	Reading qs for 1st time & having listened to half of the news item	Bilingual: Langenscheidt & Then VOX Finally Monolingual: Merriam - Webster	Never checked back for def.	NO, but VOX dict. doesn't download word (probably because st left a space after the word). Slow connection	Types *take over*. Dict doesn't accept two words. Erases *over*. Dict downloads *take* but *take over* wasn't included. Changes dict. Types *take over* again. Dict doesn't find it. Erases over. Minimises. Checks a couple of times, it takes time to download. Changes dict. Types *take over* again. Minimises & never checks back for def.

Table 6.17 Student F: looking up *take over*

We can observe from what is described in Table 6.17 that there were various difficulties, which mounted up one after the other and did not help in the downloading of the definition. In the end student F was so engrossed in the task that she forgot to check if the dictionary had managed to download the desired entry. The same happened to student K in session 4 (word: *antagonising*); for further details check the *Dictionary use* folder of the **ImPRESSions** DATA Disk.

Forgetting that the dictionary was searching for a word was a repeated feature in various students. Probably an interesting occurrence was what happened to student H in session 3, television. He was one of the few students who managed to catch a word from the aural input as described in point 6.2.1 or in table 6.10 above. Once he started the search and minimised the dictionary window he kept on listening to the news item and doing the exercise. However, he never checked the definition until he remembered it when doing the retrospective questions. As we have demonstrated in the last three examples, minimising the window has potential problems, although for most of the cases it was an effective strategy to overcome the delay of the definition downloading.

If we consider the interruption factor, we can point out a drawback in using Internet dictionaries since when the dictionary did not manage to connect, a message (with a sound) popped up announcing that the Internet site could not be found. Those messages, although somehow useful as a reminder, were breaking the flow of students' working. We can find examples of this in student G in session 2, newspaper (word: *brothels* and *related*) or student B in session 2, radio (word: *inmates*). In extreme cases, some students could not even manage to access the dictionary, such as student D, in session 1, student K in session 2, newspaper and student Q in session 3, newspaper which implied a constant interruption of their working and thus making the look-up task a demoralising experience.

Internet dictionaries, therefore, are helpful in that they do the search for you but the particular feature of the delayed response can cause problems as outlined in this point. Students should develop a different set of skills to take as much advantage as possible of this potential drawback. The gap between access and consultation can benefit learners in that they are allowed time to revise their hypothesis and may even decide not to consult it after all since by then they have managed to guess the word by themselves. In that respect if teachers point out this strategy to learners, they may consider that delay as beneficial in their learning process and not simply as a

nuisance in performing the look-up task. In some cases this annoying feeling caused students to behave in a certain way. In that respect, some students decided not to use it, as student H illustrated in session 3 newspaper:

> "**Tutor**: Which words didn't you understand?
> **St H:** *slick, nought* and *workload.* You see, 3 words. If I looked up all of them, it will take me too long...If I had a dictionary at hand I would have looked them up...If I had a conventional dictionary...I may have looked them up. I prefer to make the search myself....I don't like those translator machines ...the fact that the dictionary gives you the words without searching for them...I don't like it. I prefer to look them up myself. Moreover, I am aware that in this way I retain words better."

Student H's own beliefs, as far as vocabulary retention is concerned, also prompted him to behave in a particular way. His belief prevented him from seeing the benefits of that delay. However, we must admit that all learners expect that a dictionary should be fast, solving the problem at once. However, as demonstrated in the examples reported above, the dictionary is not going to solve all the problems and the learners should be aware of that, and develop dictionary skills to make the look-up task more efficient and effective. The benefits of using Internet dictionaries should also be pointed out to learners and specific Internet dictionary skills should be developed, as we will illustrate in the following point.

6.2.6 HOW: DICTIONARY SKILLS or INTERNET DICTIONARY SKILLS?

From the data in *Dictionary use* folder in **ImPRESSions** DATA Disk we can observe that students displayed a variety of dictionary skills either in general terms or Internet specific. Students behaved differently depending on many interactive factors: computing skills, general dictionary skills, linguistic level, style of working, time of day, tiredness, amount of time spent in the session, etc. On account of this, we will describe the students' dictionary strategies and skills that occurred more often, with some interesting peculiarities which can illustrate specific strategies students developed.

One of the most common problems using online dictionaries when the words are not directly linked to a definition is typing errors. We observed that errors of entering the word wrongly increased the interruption of the learners' task and in the case of student B did not even help him to retain his dispersed concentration. As most students had problems with typing, the issue here, however, is to identify if the problem was one of typing or one of wrong mental fixation of the right spelling. Most of the time learners did not pay close attention to the spelling of the original word and hence, the consequent misspelling of the word in the dictionary search area. Therefore, in those instances the look-up process was slowed down since the dictionary could not find the word.

Students B and O are clear examples of two different approaches. Student B had real problems spelling or typing words, not for lack of typing skills, but we believe that he may have suffered from some degree of dyslexia. His computing skills were quite high being a computer programmer, but he did not use them to his advantage. Student O also showed problems in his typing or spelling skills in session 1 and 2. However, in session 3 and 4 he started to solve this problem with the Cut-and-Paste facility of the computer. From then on he started to use the combination of keys: *Ctrl+C* and *Ctrl+V* which solved his misspellings. Student B knew about the key combination but this did not occur to him in order to solve his problem.

Student O's cut-and-paste procedure, however, was not free of problems. One problem was that he was pasting a space after the word, which made the dictionary fail to download the words requested. (see student O document in session 3, word: *ongoing*) Another problem he encountered was the fact that some of the spellings were from British English and student O was using the monolingual dictionary which is American. The fact that he was cutting and pasting helped him realise that the spelling was correct but that something was not quite right with the dictionary not responding according to his request. He checked a couple of times until my intervention assisted him in solving that mystery. An example of this can be seen in document of student O in the folder *Dictionary Use* in the DATA Disk, session 2, word: *galvanize*.

There were also instances when the Internet dictionaries actually managed to give an approximation which helped students in that task. One example of this happened in session 2 newspaper in which student R typed *bourgeoning* after consciously checking the text to be sure about the correct spelling. The dictionary did not find a match for that spelling but

provided a list of possibilities for the student to choose: *bargaining, burgeoning, persimmons*. Obviously, student R selected the second option and managed to access the correct entry. That word was a recurrent spelling problem and some students, such as student S, realised that, which is the reason why she rechecked its spelling before sending the search.

Another constant spelling problem was the verb *strengthened.* Student C had also spelling problems as reflected in Figure 6.2 below where he had great difficulties in looking up and writing down the word *strengthen*:

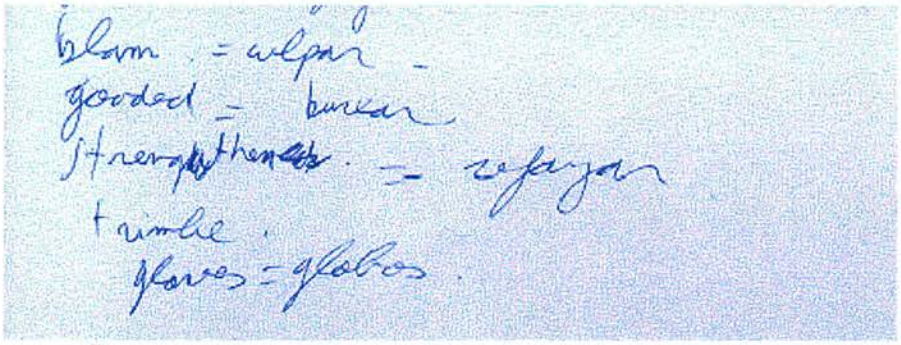

Figure 6.2 Extract from student C's notes, session 4 newspaper

Student G had the same spelling problems, as we illustrate in table 6.18 where a summary of her actions shows the number of stages that she went through in order to type the correct spelling of the word "*strengthened*":

∇ Types *streng**h**tened*
∇ Minimises dictionary window
⇒ Dictionary cannot find it
∇ Erases **–ened.**
⇒ Dictionary cannot find it either
∇ Adds **–en**.
⇒ Dictionary cannot find it either
∇ Moves Dictionary window a couple of times to check spelling
✪ St mentions: it's like German! (*meaning very strange long word*)
∇ Types ***strengtheneed***
∇ Stops connection and erases ***–eed*** and types **-ed**
⇒ Dictionary cannot find it.
∇ Erases **–ed**
∇ Finally Dictionary downloads definition: **strengthen**

Table 6.18

However, at one point in session 4, newspaper student G typed the word *glove* with the correct spelling and the bilingual dictionary started to download the definition of *globe.* Student G read the definition quickly and went back to the text. She mentioned: "I do not know how to go about looking up "*wearing rubber gloves*". While she was reading and translating this sentence, she realised that the entry she had just read was spelled with **b** and thought that she had made a spelling mistake when it was actually the dictionary which just started to download the entry *globe* as one of the entries for the searched word. Student G, then, went back to check the dictionary and by that time the dictionary had finished downloading the student's vocabulary search. She then scrolled down the entry and realised that after the *globe* entry there was the definition of *glove*. She managed to read it and solved the problem she had. The problem here was that student G was too fast looking up the word and did not let the Internet dictionary finish its job. Yet, we can see how the spelling of a word can influence the effectiveness in comprehending a text.

Another recurrent problem in the study is that students typed words in their original form: verbs in past tenses or the third person singular of present tense, plurals, even two words in the case of phrasal verbs. In most cases, the dictionaries did not find the corresponding entry and the student had to erase the part required. Students realised that in the first sessions, thus when they were doing it again they quickly identified what the problem was. However, there were instances when students did not modify their action as we can observe in student F who kept typing past tenses every time in session 4 (*barracked, jostled*) although she knew the dictionary did not respond to those forms.

In that respect, when she deleted the past form of the verb *jostled*, she erased the *–ed*, revealing her lack of knowledge of the verb or in this case the regular form of the verb. However, the dictionary provided the correct word that she was searching for. In that sense, dictionaries could assist learners to realise the spellings and/or past forms of verbs in a way that could not be possible in a conventional dictionary. On the other hand, with a conventional dictionary the alphabetical order might quickly reveal that the verb is *jostle* and not *jostl*. Similar occurrences happened to various students, such as student C and the word *blam-ed*[1] (see his notes on Figure 6.2 above), or student T and *haile-d,* or student E and *prais-es.* In these and other cases students were not searching for approximations but

[1] First part was the one students typed in the search area of the dictionary and the second part the one that they erased.

genuinely did not know the infinitive form of the verb. The Internet dictionary in that respect helped them in that task so they realised the correct form of the infinitive. As for the plurals of nouns, similar instances occurred as we can observe in student O in session 4 and the word *civilitie-s*.

The same happened with phrasal verbs where students usually typed both words and the dictionary did not respond accordingly. After two or three repeated instances in the first sessions most students learnt the lesson and in the following sessions they typed directly only the verb form of the phrasal verb. One interesting example of how different students reacted to the same dictionary response when looking up phrasal verbs is what student H and student U did in order to find out the meaning of *take over*. Both students typed the two words, and the dictionary could not find the entry as such and thus it responded as follows:

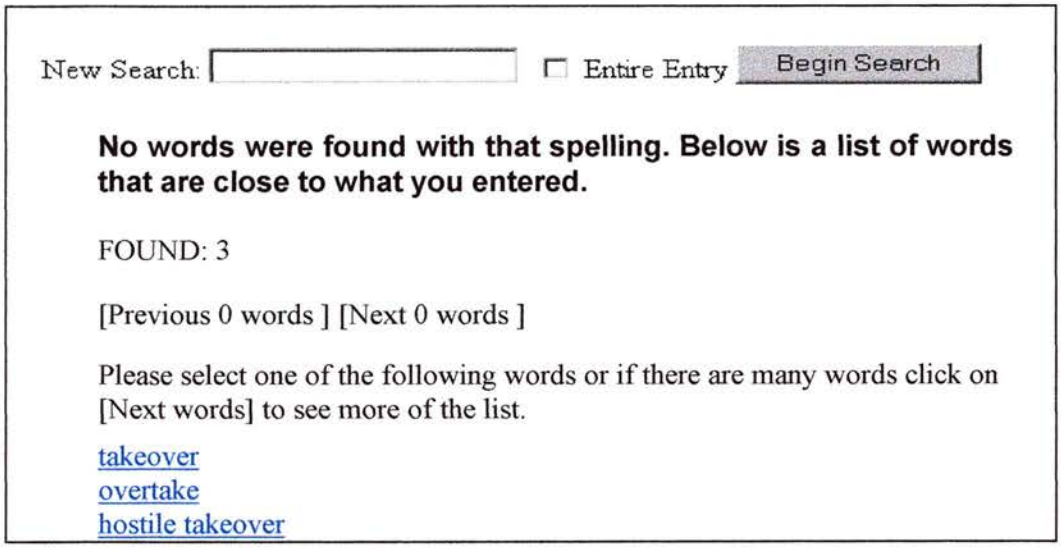

Table 6.19 The Newbury House Dictionary's response to search for *take over*. *(Retrieved in May,1999)*

Student H ignored the list and typed *take* in the New search area. He then scrolled the whole entry down scanning until he managed to find the definition for *take over* and read it. Student U, on the contrary, followed the first suggestion of the dictionary clicking on the link (*takeover*). She then read the definition of this noun and adapted it to the verb form, which was the one of the context. In both cases students succeeded in finding the right definition although their strategies and procedures were different.

When the dictionaries provided a list of suggested spellings, some students ignored or did not read that list, as student C in session 3. He typed *wider* and the dictionary was not

downloading, probably because it could not find it and it was sorting out the list. Then student C decided to stop and erase the ending *–er*. The dictionary downloaded the following message:

The word has not been found!
You were searching for **wid** in the **English**-Spanish dictionary.
The spellchecker suggests the following:
aid bid did hid id kid lid mid rid tid wad wed WI wide wig wild win wind wit WI d WI-d w id w-id.

Table 6.20 Message from *Langenscheidt's English-Spanish Online* (my emphasis). *(Retrieved May 1999)*

He did not read the message since the word which he was trying to look up was in the list, and then he went back a step in the dictionary in order to type *wide* to begin the search again. If student C had realised that the word was there, he would have saved one step, and been more efficient with his look-up behaviour. This example underlines a basic issue about working with computers: in general people tend not to read all the information on screen, especially instructions. We usually skim read them, skip sections and sometimes omit relevant information that could save us time.

Another of the problems that students had at the very beginning, usually in the first 2 sessions, was that they did not know exactly how to begin the search. For instance, student V typed two words: "challenging pupil" and the dictionary obviously could not find an entry for those. Then she realised that the dictionary only accepted one word and erased the second one.

Some students solved the same problem using the capability of the dictionaries to find approximations of the desired entry. Student I describes this in session 2 talking about "challenging pupil":

> "**St I**: I didn't know how to look it up because I didn't know how it would come up...as a set phrase ...so if I typed *challenging pupil* it would not come up with a definition...so I thought that the most important word was challenge and as the dictionary gives you the option to write only the beginning and then it gives you all the words that start with that beginning, I typed only the beginning, *challen* ..."

Student T had the same problem with the word *sticking plaster* from session 1 radio. She typed *stick* and the dictionary provided her with a list of words that begins with stick- which

included the desired word. Student T carefully scanned all the entries in the list and managed to identify what she was looking up.

Student I, however, used the same procedure for the word *relentless* and typed *relent* and the dictionary provided the definition of the verb: "to stop doing s.t., to become weaker" which had nothing to do with the adjective *relentless*: "without stopping, (*syn.*) persistent." Student I could not match the verb definition with what the feedback explanation was describing and thus misinterpreted it. This example also reveals another issue: students' general trustworthiness of the computer responses. In some cases students did not apply critical look-up behaviour and thus accepted all of the Internet dictionaries responses.

Student L, in session 3 radio, looked up the verb *streamline* but he chose the noun definition and the actual word was a verb. The problem in this case is that the learner did not manage to analyse the context of the word since he wrote it down from the subtitles of the radio while listening and thus presumably missed the context. Once he looked it up, he chose the first entry available without considering the grammatical function of the word which resulted in partial understanding of the text. Student L repeated the same procedure when he was reading the articles. Then he had the possibility of analysing the grammatical function but again he chose the wrong option. The word was *launch* from the article of session 3 in the sentence: "*In the cinema commercial to be launched nationwide on Friday* [...]". The definition the dictionary downloaded is the following:

v. **1** to push into the water: *We launched our boat into the lake.* **2** to send up into the air: *The spacecraft will be launched tomorrow.* **3** *fig.* to start, put into operation, etc.: *Our company launched an advertising campaign for our new product.* *-n.* **1** *sing.* the start, the process of putting into action: *The launch of the new advertising campaign will be next week.* **2** [C] the sending of s.t. up into the air: [...]

Table 6.21 Definition of *launch*.
The Newbury House Dictionary Online
(Retrieved May 1999)

He wrote down the following on his notepad: *the start, the process of putting into action.* This example reveals that student L read the definition but did not even consider the grammatical function of the word. In this case, it was not that problematic since both meanings, as a noun or as a verb, are quite close.

Trying to find the appropriate definition was somehow problematic for some students in some sessions. For instance student E in session 3, newspaper tried to look up the word *target,* as summarised in the following table:

Word	Dict.	When check definition	Reading entry	Definition chosen	Reason for looking up	Action after looking up
target	Monolingual: Merriam-Webster	Immediately after downloading	Reads whole def. & checks context. (p8) at same time	1. a small round **shield** 2a: a mark to shoot at b: a target marked by shots fired at it c: something or someone fired at or marked for attack **d: a goal to be achieved** 3a an object of ridicule or criticism b: something or someone to be affected by an action or development. 4a a railroad day signal that is attached to a switch stand and indicates whether the switch is open or closed b: a sliding sight on a surveyor's levelling rod. 5a the metallic surface (as of platinum or tungsten) upon which the stream of [...]	St admits st should know the word but doesn't remember & couldn't get it from context.	St can't find the appropriate meaning for the context. Decides to look up *shield*
shield	Monolingual: Merriam-Webster	Immediately after downloading	Reads whole	1. a broad piece of defensive armour carried on the arm 2. one that protects or defends: DEFENSE [...]	Just in case it gives some clue to the meaning, st tries to get it for that context.	St doesn't understand it so decides to change dict. & use a bilingual one: VOX., as st couldn't find meaning. Looks up *target*
target	Bilingual: VOX	Immediately after downloading	Scan reads	noun 1. (*of missile, goal, aim*) objetivo: we must meet our sales targets, tenemos que alcanzar nuestros objetivos de ventas [...] 5. (*cause to have effect on*) dirigir a, destinar a;: a campaign targeted at young people, una campaña dirigida a los jóvenes.	(see above)	Mentions: *destinos, objetivos* & keeps on reading text.

Table 6.22 Summary of student E look-up behaviour for the word *target. (my emphasis in **bold**)*

Fortunately, student E managed to find the right definition, however, he followed a "twisted road" to finally reach the "targeted" definition. Student E did not read the first definition carefully in which entry **2d** (see Table 6.22) could have provided him with the appropriate definition.

This problem was a repeated feature in various students, both *High attainers* and *Low attainers*, which makes us reflect that the fact of reading on a computer screen may have had an influence in missing the appropriate definition. Besides, in some dictionaries, as is the case with the Newbury House Dictionary Online, the space between lines and the space between definitions is quite cramped, making it more difficult to read. However, students also failed to find the correct definition even when a dictionary such as the VOX, which has different

colours to distinguish examples from the definitions, and has a clear layout with numbered bullet points. Student E in the same session as above obtained the following definition for the word *slick*:

adjective
1. (*skillful*) mañoso, -a, hábil, diestro, -a (*smooth*) fluido, a slick changeover, un relevo rápido.
2 (*attractive*) ingenioso, -a, logrado, -a. (*effective*) eficaz, impresionante, a slick advertising campaign, una campaña publicitaria muy lograda.[...]

Table 6.23 Definition of slick.
English - Spanish VOX Dictionary Online
(Retrieved May 1999)

He chose (*ingenioso*) which is more or less appropriate for the context but it is surprising that the student did not notice the example and the most direct translation (*logrado*) which is exactly the same as in the article.

In other instances students did not even read the whole definition so they could not find the appropriate one. Student C for instance did not realise that the word he was looking up from the aural input was there in the entry. He skim read the entry very quickly but failed to identify that it was there. We later on commented in the interview:

> "**Tutor**: You caught the word "streamline", didn't you?
> **St C**: Yes, ...well, yes.
> **Tutor**: What did you do?
> **St C**: I looked it up in the bilingual dictionary
> **Tutor**: It's funny though that when you looked up "stream", you didn't realise...
> **St C**: and was the word streamline there? Are you sure? (*he checks downloading entry again*)... You see, I read this (*aeródromo militar*) but nothing else.... OK! (*meaning it is there*)"

Student C managed to catch the word, which the majority of students did not or could not, and he also managed to work out an approximation of the word, so the dictionary could do the job for him, but in the end he failed in obtaining the desired definition because he had poor dictionary skills. As mentioned above in point 6.2.5, he tended to choose the first definition discarding or not reading the rest.

Other peculiarities of using Internet dictionaries identified are that some students did not scroll all the definition down so they could not have the most adequate definition on the screen or they simply did not allow the dictionary to download the results page completely with all the definitions or entries. Student G in session 1 looking up the phrasal verb *draw up* scrolled the definition of *draw* to end of the page but in reality it was not the end of the

resulting web-page since she did not allow time for the whole entry to download. As a consequence, she changed dictionary, which unfortunately had limited entries, and *draw up* was actually not included.

From the observation of some students we realised that sometimes students did not find the appropriate definition because they had a preconceived idea beforehand and thus it was more difficult for them to make the right choice. One enlightening example is student G and her struggle to find the meaning of the word *reported* from question 7 in session 4 television: "Tony Blair was *reported* to be upset by the rowdy scenes in East Belfast". She could not fit any meaning she was reading in the definition in that particular context. She was unable to identify a similar context in the following definition:

noun
1. (*informative document*) informe (*m*): the government commissioned a report on national security, el gobierno encargó un informe sobre la seguridad nacional.
2. (*school report*) boletín (*m*) escolar, informe escolar.
3. (*piece of news*) noticia: reports are coming in of an earthquake in Tibet, nos están llegando noticias de un terremoto en el Tibet.
4. (*news story*) reportaje (*m*): and now a report on otter breeding in Devon, y ahora un reportaje sobre la cría de nutrias en Devon.
5. (*rumour*) rumor (*m*): there are reports of a royal divorce, corren rumores de un divorcio real.
6. (*of gun*) estampido.
intransitive verb
7. (*give information*) informar ((on, sobre)): the committee will report on its progress each month, el comité informará de sus progresos cada mes: he has reported on several wars, ha hecho reportajes sobre varias guerras.
8. (*go in person*) presentarse, personarse: I reported to the commanding officer, me presenté al comandante.
transitive verb
9. (*say, inform*) decir: forty people report seeing the UFO, cuarenta personas dicen haber visto el ovni: her condition is reported to be serious, según se informa, su condición es grave.
10. (*to authority*) informar de: I shall report you to your superiors, informaré de usted a sus superiores: he reported the breakdown to the maintenance department, dio parte de la avería al departamento de mantenimiento.
11. (*to police - crime*) denunciar; (*- accident*) dar parte de: you should have reported the accident, debiste dar parte del accidente.

Table 6.24 Definition of *report*. (my emphasis)
English - Spanish VOX Dictionary Online
(Retrieved May 1999)

From the recordings we know that she read the majority of the definitions skipping the examples, sometimes she even subvocalised her reading of the definitions and partially thought aloud. Student G got in her mind that "Blair was reported to be upset" was the same as "Blair was asked to..." and thus she could not identify that actually there was an entry which had the exact context: the second part of entry 9 (see Table 6.24 above). The problem was, of course, that she did not know the structure "*to be reported to + infinitive*" but her

fixation did not help her to be open to other possible suggestions the dictionary could make. Dealing with the same word, student D, on the other hand, managed to identify the exact translation (*según se informa*) and jotted it down. Curiously, student D answered question 7 incorrectly whereas student G answered it correctly without clearly understanding that particular structure of the verb *report*.

In most instances, however, students managed to find the correct definition instantly or, if not, they displayed sensible dictionary strategies to find it, as demonstrated in the following example of student A looking up the word *barrack*:

∇ Types *barracked* using Monolingual: **Newbury House**
⇒ Definition downloads immediately: **bar·racks** /'b r ks/ *n. pl.* building where soldiers live
∇ Student A is not convinced by definition. She types *barrack* and obtains same definition
∇ Scrolls text to top, and checks word in text,
∇ Changes dictionary to monolingual **Merriam-Webster**
∇ Types *barrack*
⇒ Dictionary provides a list of 3 entries. St selects entry 2 *transitive verb* firstly.
[2]barrack
Function: *transitive verb*
: to lodge in barracks
∇ Then selects entry 3 verb. While waiting for new definition, she realises that entry 1 is already on page and reads it:
[1]bar·rack
Function: *noun*
1 : a building or set of buildings used especially for lodging soldiers in garrison
2 a : a structure resembling a shed or barn that provides temporary housing **b :** housing characterized by extreme plainness or dreary uniformity -- usually used in plural in all senses
⇒ Then definition of entry 3 downloads:
[3]barrack
Function: *verb*
transitive senses chiefly British **:** to shout at derisively or sarcastically
intransitive senses
1 *chiefly British* **:** ROOT, CHEER -- usually used with *for*
2 *chiefly British* **:** JEER, SCOFF
∇ Reads it
∇ Jots down definition: *to shout at derisively or sarcastically to be jeered = to barrack*

Table 6.25 Students A's look-up process for the word *barrack*
Definitions of *barrack* from *Merriam-Webster Dictionary Online*
(Retrieved May 1999)

Most students, with very few exceptions, did not read or pay any attention to the extra information the dictionaries provided, such as pronunciation or etymology which the Merriam-Webster Dictionary included before the actual definition:

Main Entry: **[1]bar·rack** Pronunciation: 'bar-&k, -ik Function: *noun* Etymology: French *baraque* hut, from Catalan *barraca* Date: 1686

Table 6.26 Information of *barrack* before the definition.
Merriam-Webster Dictionary Online (Retrieved May 1999)

This extra information was not relevant for the tasks so students ignored it.

A strategy that some students developed was to move or resize the dictionary window to overcome the fact that the dictionary opens in a separate window on top of the questions and partly covers the text in the newspaper article section of the sessions. Either for checking the spelling of a word or trying to fit the definition in the context of the text, students, such as G and R, moved the dictionary around the screen in order to have both texts at once for comparison. Others students, such as I and O, resized the window for the same purpose. Student I even reduced, reshaped and moved it on top of the left margin so he could have the dictionary, the text and the questions at the same time. Student O and student B also used the key combination Alt +TAB to move from one window to the other. Those more sophisticated computer skills were not performed by the majority of students who did not move and, even less, modify the dictionary window, they just minimised the window to keep on working, or minimised and accessed it alternatively moving the mouse to the bottom taskbar. Others students, such as E as described in Table 6.21 above, approached from another perspective, and instead of modifying or moving the dictionary window, they moved the relevant piece of text on the top area of the screen to its top, where the word being looked up was, so the dictionary could not cover the text. Therefore, while having the dictionary window open they could compare both text and definition without modifying anything. All these strategies served the same purpose: checking definitions in context to try to find the most suitable one.

From what we have described in this section there is a need for developing learners' dictionary skills in general but also for training learners in using Internet dictionaries more effectively. Doing the latter includes the former and thus by improving CALL skills we are at the same time building strategies which learners can later transfer to the real world even when they are not using Internet dictionaries. In that sense we are providing learners with more tools to become more independent in their language learning.

6.3 THE USE OF CULTURAL NOTES

Cultural notes (CNs) directly relate to the background knowledge of the students on the topics presented in the news items and thus their consultation was determined by the individual needs of each student. In that respect, we describe the use of this facility taking the sample of students as a whole without considering the independent variables of linguistic level or perceived language strategy use, which may have less or no relation to the use of the cultural notes.

6.3.1 HOW MANY TIMES

After observing the learners I had the impression that students who consult more CNs also look up a greater number of words in the dictionary. Thus, using the statistical program SPSS for Windows, we correlated the number of times each learner consulted the cultural notes and each student's total of look-ups (Table 6.27). The result was the following:

		TOTMB	TOTCN
Total Dictionary Lookups	**Pearson Correlation**	1.000	.377
	Sig. (2-tailed)		.084
	N	22	22
Total Cultural Notes Consultations	**Pearson Correlation**	.377	1.000
	Sig. (2-tailed)	.084	
	N	22	22

Table 6.27

There is a slight positive correlation of 0.377 ($\alpha = 0.08$), which could suggest that students who used the dictionary a lot also consulted the cultural notes a lot. Therefore, this slight correlation seems to reveal that there were students who were "*compulsive consultors*" and wanted to know as much detail as possible about the news item, such as students B and G, and students who tended to consult less and were content with a more global understanding, such as student R, S and H. However, students E and M consulted nearly all the cultural notes in the four sessions although the former was an average frequency user of the dictionary and the latter a low frequency user. This consultation behaviour is, therefore, closely related to students' approach to the tasks or their particular learning styles.

6.3.2 WHAT CNs and HOW MANY STUDENTS

Students mainly consulted the CNs in the newspaper articles and only a few did from the radio or television transcripts. On account of this, we will basically concentrate our description and discussion on CNs from the newspapers. Tables CN1 to CN4 in Appendix C describe the number of students who consulted each CN in the newspaper articles. Considering their classification as outlined in point 4.6.2 above we can observe that the most often consulted CNs in the four sessions are the acronyms which are included in the articles of sessions 1 and 3. In session 1 the CNs consulted most often were MoD (18 students consulted it), NHS (16) and DTI (15) and in session 3, NASUWT (20), TTA (18) and Ofsted (18). Most students reported the obvious need to know what they meant, with few exceptions, such as in session 3 student J, for instance, reported: "these ones (*acronyms*) I managed to guess that they are teaching associations or professional colleges" or student R, who did not consult any, reported in session 4: "No, I didn't have curiosity...I guess that those acronyms are trade unions, or government departments or schools in general or specific...I was not interested."

The last example raises an important factor for CN consultation: learners' interest. In that respect, student N, being a teacher trainee, reported the contrary in session 3, showing curiosity and interest:

> "**St N**: *Eton*, for curiosity and *Teaching Agency* also for curiosity as I am part of this professional world...and *Ofsted*, which has surprised me that the inspection is carried out by an agency which is not related to the government...and of course, the acronyms, to know what they were."

Student N is also using her background knowledge here to compare situations, underlining differences between the Spanish inspection system and the British one. The CNs in this case prompted her to analyse the situation out of genuine interest which made her go further from the strictly reading comprehension task. Similar reasons were reported by student A in session 1: " [...] and because I was also interested in understanding how it works...as I study Law I am interested in the structure...then, to know how it works".

The second group of CNs which were consulted more often are logically the ones which refer to the less well-known people, places, organisations or institutions from the foreign student perspective. These are listed for each session in Table 6.28 below:

Session 1
Gordon Brown (11) and Whitehall (10) and British Nuclear Fuel (9)
Session 2
Home Office (16) and Release (15)
Session 3
Fettes College (16), Teaching Agency (15) and Eton (14)
Session 4
Lloyd George (15), Stormont (14) and Martin McGuinness (12)

Table 6.28 Second most often consulted CNs' group

In the case of sessions 2 and 4 those CNs listed in the table above were the most frequently consulted of the rest as no acronyms were present in those texts.

With regard to the CNs in session 1 we should point out that the reason for their consultation may have been due to the fact that the questions referred to them directly, as they are mentioned in the question, or indirectly, since some questions refer to the paragraph where the CNs are included.

As far as session 4 is concerned, it is surprising to note that although the CNs *Lloyd George* and *Michael Collins* were close together in the same paragraph there were only 10 students who consulted the latter as opposed to 15 for the former. The most likely reason for that is that students recognised the name from the popular film, *Michael Collins*. On the contrary, this fact prompted some students to consult it out of curiosity, as Student P, mentioned: "[...] and Michael Collins. I saw the film...for curiosity." With regard to the CN *Stormont*, students had already heard it on the TV news item which may have prompted them to find out what it was then. However, the case of student V was the other way round: "for instance, *Stormont*, I knew that it was the place of the meeting since I watched it on the television".

The rest of the consulted CNs have something in common: they were less consulted and when they were, it was mainly out of curiosity or personal interest. However, this was not always the case.

In general terms, from the data retrieved from the retrospective interview we can assert that students consulted CNs depending on their individual needs and liking, thus it is difficult to pinpoint a reason for consulting a particular CN. Some students perceived some of the CNs as helpful information to understand the text, others because they were simply related to the questions, for instance, Student T, session 1, (CN: *Frank Dobson*) mentioned that she consulted it because his name was mentioned in one of the questions, actually question 8. Other students checked CNs to confirm and others consulted them for sheer interest or curiosity. The majority of the students, though, perceived most of the CNs as extra information which complemented the text and to read them was not strictly necessary for the understanding of the texts.

To illustrate this variability, here follows some of the comments different students made about the CNs in session 2.

For instance, student E said: "I usually like consulting all of them more for curiosity than anything else" or student C reported " I didn't need them to understand the text...for curiosity basically". However, other students find them useful, student L in the same session commented:

> "**Tutor**: Did you consult any Cultural Note?
> **St L**: All of them
> **T**: Why?
> **St L**: Because they are useful ...they helped me quite a lot to understand, for instance, this one about Home Office. It was relevant to understand...[...]"

Some consulted CNs although they had knowledge about them already: student H mentioned: "Yes...the one about *Home Office*, although I knew it, it was to confirm...". Other students did not consult them, either because as student F said: "No, I didn't need them" or because they knew them or thought they knew them as it is the case of student I:

> "**Tutor**: Did you consult the Cultural note Home Office?
> **St I**: No, because I didn't consider it important because I think it is a magazine or something like that.
> **Tutor**: Really?
> **St I**: (*reads CN*) Oops! Oh, well, what a surprise! Because I was convinced that it was a type of magazine ...those types of magazines...about this topic...you know, like a magazine to advise and guide youngsters."

Student A also thought that *Home Office* may have been some sort of official publication.

Other students consulted them for a variety of reasons depending on the CN, such as student P who explained the following:

> "**Tutor**: Did you consult any Cultural note?
> **St P**: Yes, except *soft drugs*.
> **Tutor**: Why?
> **St P**: I didn't know them but here, for instance, *Release*, you have an apposition that also explains it. Perhaps I consulted them to get additional information. In the case of *Home Office* because I needed the information."

The last student was selective in her CN consultation and at the same time, was conscious of the reasons for her consulting and aware of the structure of the text. We should point out that student P was perhaps more conscious of linguistic aspects as she has a University degree in languages.

From all these examples of session 2, we can draw the conclusion that the students' choice to consult a CN was not only determined by not having the necessary background information, but also for reasons of curiosity to have additional information.

The CNs which refer mostly to well-known people and places or concepts were logically scarcely consulted, such as *Tony Blair* (3 students in session 1 and 6 in session 2) or the CNs which, although less known, were not really necessary in terms of understanding the text or had little or no relation to the questions, such as *Margaret Beckett*, (5 students in session 1). Some of these students reported that they wanted to see their photograph, such as student B, who commented about Blair's photographs in his office in session 3, or student M in session 1, who was surprised by the fact that the Secretary of State for Trade and Industry was a woman and wanted to see what she was like.

Reasons given by students for not consulting the notes were multiple:

Student R in session 4: "No...it was clear without them...if I hadn't understood what it was about...but it was quite clear" or student S in the same session mentioned: "No I didn't need them. You know, I am very cultivated (*tongue in cheek*) (*laughs*)...if there had been more complex things maybe...but I didn't need them". It was not clear though if she referred to understanding the text or the fact that she did not need them to answer the questions.

Student Q in session 1 did not consult any since he did not realise that the CNs were there. He reasoned this behaviour saying that he had only two minutes and then did not realise that he

had them on the text. This is also an indication that session 1 has to be treated as exceptional in most cases since it was the students' first experience with the program.

The last general reason for not consulting CNs in the newspaper articles was that some students had already consulted them in the radio or television transcripts as is the case of students M, O and U in session 4 who stated: "None, because the ones I needed I had already consulted in the transcript". In that respect, all of them reported that the fact of having consulted the CNs before in the Television transcript helped them to be more prepared for understanding the newspaper article. As student U described it: "Yes, the cultural notes as well. You, more or less, 'know where the wind is blowing from', who is who, ...because apart from *Gerry Adams, Tony Blair and Michael Collins*, the rest... (*meaning she did not know the rest*). "

In session 2, the newspaper article was a Second encounter as in session 4, and thus students B, M, R, T and V had already consulted the *CN Rehabilitation for Addicted Prisoners Trust* in the transcript, which, with the exception of student R, they went to consult again in the newspaper article but as they realised it was the same one, most of these students did not read it again, or only read it partially as student V admitted:

> "**Tutor**: This one, (*RAPt*)...you had already consulted it on the radio, hadn't you?
> **St V**: Yes, but I consulted it again. You see, I realised that I had consulted it due to the graphics (*logo*). I started skim reading and then I stopped...the graphics looked familiar...all green and that..."

Mainly two types of students have been identified according to their approach in CNs consultation, the "*compulsive consultors*" who consulted all of the CNs such as student B who in session 1 commented: "I skim read all of them...more than anything else, the acronyms, ...the others for curiosity...and to see the photo" or in session 4 student D who said: "I consulted all of them...some for curiosity and some because I needed the information. I jotted down *Sinn Fein* for curiosity". The second type, the "*selectors*" had a more selective approach in their CN consultation. A perfect example is student H who reported: "Yes, only *NHS*...because I did not know...generally there is an apposition and then it's not necessary. You don't need to know the person's biography but his/her function and that's it". Generally *selectors* seemed to be more aware of learning strategies and were more conscious of the structure of the text as illustrated in the last example.

6.3.3 WHAT ELSE: non-existent CNs

In the retrospective interview we asked students if they needed some other CNs which were not included in the newspaper articles. In sessions 3 and 4 none of the students needed extra CNs. In session 1 student T pointed out the need to have some explanation of the word *Tory* from the questions although it was already explained under the CN *Conservatives* in the text. However, as some students did not consult the note they could not associate the two concepts.

In session 2, student R was confused by the word *agencies* as the same word in Spanish is used in another way from the one in the context of the article. She thought that the CNs already in the text were too easy and well known, such as *Home Office* and *soft drugs*. Therefore, she thought that it would be a good idea to have a note about that difference.

In session 2 also, 11 students mentioned the need to have some sort of explanation why the anti-drug co-ordinator was named "tsar". As student A commented: "For instance, I would have liked to have a cultural note explaining about why they called him *tsar*". Most students had problems with that word "tsar", some, such as student T even after looking it up in the dictionary could not think of a reason why he was called that way, whereas others such as student U managed to identify a reason.

When student K first read *tsar* she thought it was a play on words for *star* which she imagined had some logic since it refers to the anti-drug "chief". Student B was mispronouncing it /esta:t/ as in *start*, and /'ti: 'sar/ as in *t-sar*, when he was reading the text aloud and commenting on it, until he realised it was *tsar*. The most curious case was student Q who thought it was in fact an acronym:

> "**Tutor**: Did you have any vocabulary problems?
> **St Q**: Yes, with T-S-R-A....this...acronym...which I didn't look up but it must be some sort of commission
> [...]
> **Tutor**: would you have liked to have a cultural note?
> **St Q**: Perhaps. As there's a hypertext link for *Home Office*...well, TSRA that you don't...why not, to know what it is."

Student P did not have problems with pronunciation but she thought at first it was some sort of commission or organisation, then she realised it referred to the anti-drug co-ordinator and thought it could be related to the Russian tsar but she did not know why, and finally went back to think that it did not refer to a person but an organisation. In the retrospective question she managed to work out the metaphorical sense of the word.

Student R even consulted the other newspaper article related to the one of the task but as it was too long she only skim read the first part and did not manage to read the part where this is explained. From the two texts, she understood the basic idea but could not think why they called him *tsar*.

The reason for not incorporating this word as a CN, as pointed out in Chapter 4, 4.6.2 above, was to observe how learners could react to that and how they managed to solve the problem. It is clear then that this CN would have been really useful to at least over 50% of the students in the sample. Even students who showed a rich and wide variety of strategies, even realising that the word was between inverted commas and understanding that the word related to the Russian tsar, had difficulties to understand the metaphorical sense or to guess why they used that name. *Higher attainers* and *Low attainers* had problems with the concept, and although it did not impede their comprehension of the text, they all missed part of the cultural aspect of the news item.

6.3.4 WHEN

From the screen video recording and the direct observation we notice that students followed some sort of patterns regarding when they consulted the CNs.

We observed that students consulted the CNs with the following procedures:

When students consulted CNs.	Example of an identified instance.
• when they encountered the CNs without finishing the sentence, while reading	Session 2: student K reads all the notes of the text when he encounters them and keeps on reading.
• when they finished reading the sentence or paragraph of the CN(s)	Session 2: student R after reading paragraph 12 consulted CN: *Release*.
• when they finished reading a chunk of text (two or three more paragraphs)	Session 1: student I after reading half of the text, goes back directly to top and consults CN: *NHS*
• before they read some extract (a paragraph or chunk) of text in detail	Session 4: student B scrolls down text while reading and before starting to read paragraph consults CNs : *NASUWT, TTA, Ofstead, Association of Teachers and Lecturers*, one after the other then starts reading p11
• when they finished reading the whole text and consulted some randomly or one after the other.	Session 2: student J after having finshed reading the whole text he consults CN *soft drugs* and checks *Home Office*.
• when they read a question and went directly to the note	Session 1: After reading question 1 student A goes directly to consult CN: *MoD*
• while waiting for definition of dictionary to download	Session 2: student G while waiting for definition of *brothels* to download she consults CN *soft drugs*

Table 6.29

In some cases it was not all that easy to observe these procedures since students did not really signal their mouse moves on the screen, but sometimes we could clearly identify when they were accessing it, whether it was immediately after they encountered it, after reading a chunk of text where the CN was, or prompted by what they read in the question. Probably the most difficult procedure to identify was the second strategy, whether the student finished reading the sentence or not and then consulted the note. We acknowledge that this procedure may have occurred more times than the few ones we managed to identify since in most cases there

was no external sign to indicate that the student had finished reading the sentence, as this was happening in the student's mind.

Furthermore, in some cases I asked them directly in the retrospective questions in order to confirm my observation. Student K responded:

> "**Tutor**: How did you go about it?
> **St K**: While I was reading, I consulted the note when I encountered it.
> **Tutor**: But in this case (*Release*), it explains it afterwards
> **St K**: (*laughs*) I followed and then ... you see, I don't read all the paragraph and then decide whether to consult it in case I need it for better understanding...well, I didn't. I went directly to consult them."

The procedure followed most often was the first one: when students encountered the CN without finishing reading the sentence or paragraph. It is surprising to note that students followed that procedure in which their flow of reading was broken by the CN consultation, having to restart reading the sentence. This fact reveals that hypertext links may incite learners to consult them. Further investigation, however, should be carried out taking the two conditions into account, one marked and the other unmarked, to confirm and postulate that this is the case.

Student O was a clear example of that procedure since he followed his reading with the mouse pointer most of the times. To confirm this, in session 2, I asked him if he consulted a specific CN immediately he encountered it and he responded positively. Those questions were not asked to every single student as they were prompted by the observation. Student A in session 4, however, talking about the CN *Stormont* described how and when she read it: "first I read the first lines...when I was going through the first reading...and when I finished I went to consult the note for curiosity". She obviously chose that strategy as she realised that the CN was too long and was breaking her flow of reading distracting her from her focus in understanding the text.

Taking a general overview of the data in *CN* folder in **ImPRESSions** DATA Disk, we have observed that students tended to use one preferred procedure over the others, as is the case for student K, in all four sessions, although they also used a variety of them depending on the circumstances. When they were doing the exercise, students tended to consult the CN prompted by the question which was the second most frequently used procedure. Of course, after reading the question they went back to the text and reread a paragraph and therefore they consulted the CN in there. However, sometimes after reading the question they went

directly to read the CN and then read the paragraph or sentence in order to answer the question.

Considering the 4 sessions summarised in Tables CN1 to CN4 in Appendix C, most students who approached the task choosing to read the text first before having the detailed comprehension questions (Option A), consulted the CNs when they were reading the text and did not when doing the questions, with the exception of student D in session 4 who consulted them while doing the questions. Student P, however, chose the most common procedure but she consulted one CN again while doing the questions. In the last two examples students were prompted by the questions to consult the CN. Other exceptions are student O in session 1 and student T in session 4, who read some CNs while reading the text and some while doing the questions and also student B in session 1 and student K in session 3, who only consulted one CN while doing the questions.

Students who chose option B2 (i.e. skim read the questions first, then read the text again and finally start doing the questions) behaved in three different ways. In some instances students strictly consulted the CNs when they were reading texts, such as students M and V in session 1. In other instances students consulted some CNs while reading texts and some while doing the exercise, such as students G and T in session 1. There were also instances where students consulted some CNs while reading, some while doing the questions, and some were consulted twice in both instances, such as students L in session 4 or student M in session 3. In the last cases, the students did not remember the information of the CNs or they were prompted by the questions to consult them.

Finally, if students chose B1 as their approach to the task, i.e. read the text while doing the questions, they obviously consulted the CNs while doing the exercise. Thus it is more difficult to pinpoint if it was the question or the understanding of the text that induced students to consult the CNs.

In sessions 1 and 4 there were few students that consulted the notes at the end of the task or while they were working on the feedback of their answers. Students N, P and T consulted some in session 1. Student N explained: "[...] the NHS at the end when I was doing the explanations...because I thought that maybe I was not understanding the idea ...of that". Student T, however, consulted the CN *Conservatives* as she could not understand the explanation of question 2 which had the word *Tory*. In session 4 student N consulted *Lloyd*

George and *Michael Collins* at the end of the task for curiosity and students L who consulted the same CNs again but this time it was to understand the explanation for question 3 which he failed to answer.

6.3.5 HOW

Consulting a CN does not necessarily entail that they read the whole of the information. That was clearly manifested in the observation, by the amount of time some students spent in reading some of the long CNs. Some students, such as student L in session 4, also reported this fact in the interview:

> "**St L**: All of them...for curiosity but some were too long and I only read the beginning.
> **Tutor**: Are there any that you read entirely?
> **St L**: The short ones."

In the design of the CNs, as described in 4.6.2, we decided to incorporated CNs which provide extensive information beyond what one is supposed to need for complementing the understanding of the text, e.g. *Ofsted* in session 3, or *Stormont* in session 4. In that sense, we could observe how they used these notes and if they really read them entirely. As demonstrated in the last example, students tended to skim read or read partially the CN due to its length. Therefore, the length of the CNs is an important factor to consider in their design. Providing extensive information does not entail that we are assisting learners to expand their background knowledge since longer CNs may induce them to stop reading. A balance should be reached in which the necessary information is contained within a "reasonable" length, e. g. one or two paragraphs.

Students also performed partial reading of CNs taking into account other motives. Student G in session 1, for example, detailed:

> "**Tutor**: Did you read them?
> **St G**: Yes, but sometimes I finish reading them and sometimes in the middle I think: "this is not useful to understand the text."

Student G was selective in her amount of reading within each CN, depending on the amount of relevant information the CN provided. Learners in this sense take the responsibility to choose whether a CN is providing the information they need and avoid the extra information which is not strictly assisting in their reading. However, this could cause problems if the

learners' perceived need is influenced by the length of the CN, as in the following example of student E in session 4:

> "[...]
> **St E**: I didn't get that thing of the two sides.
> **Tutor**: Did you consult *Belfast*?
> **St E**: Yes, but I didn't read everything...it was too long (*reads CN*) ...the republicans are catholic and the protestants are the loyalists. Now, I got it!
> **Tutor**:...so you didn't read the long cultural notes entirely, did you?
> **St E**: I didn't...I read until I thought....I needed it."

In this example the length of the CN again influenced the student's decision to assess what information he needed. However, some relevant information was written at the end of the note which the student did not manage to read to as he abandoned the reading before reaching that information. This instance provides us with pointers for the design of CNs. If we cannot avoid including a long CN, the most relevant information should be written at the very beginning. However, in some cases this is not possible as with *Belfast* CN, in which the historical background cannot be explained in only a couple of sentences.

In the design of some CNs, such as *Ofsted* in session 3, the graphic element was dividing the text in two parts: the top one was the brief description of what it actually was and the bottom part, the information about its function, which was the more relevant information for understanding the text. This division may have prompted some learners to consult the CN twice, since the first time they read the top part and may have ignored the second part which later on they needed, as happened with student B. An advantage of using of the graphic element in this way can be that by dividing the information we are providing more relevance to one part over the other. Thus by providing this simple layout we are indirectly helping them in their selection of information according to what we, as designers, consider more relevant to the targeted learners. Learners are more likely to read only the top part rather than the bottom. Therefore, in the case of a long CN such as *Belfast* in session 4, we could have designed it in such a way that the graphic element divided what was the more relevant information from the less relevant. In that way we may have helped some learners, such as student E above, who was concerned about the CN's length, to avoid the problem of stopping reading and missing the relevant information.

Partial reading was also related to the issue of reading the CNs fast, perhaps in order not to break the flow of reading too much. Student E, for instance, was looking for the word *Tory* in the article of session 1, which was included in one of the questions. He was checking quickly

if it was within one of the cultural notes and thus he was skim reading or reading just the beginning of the notes.

> "**St E**: [...] and this one of *Tony Blair* to see if *Tory* was his nickname or something like that.
> **Tutor**: Is that the reason why you consulted all these people in the text?
> **St E**: No I consulted the first ones because I thought that they could help me. ...that maybe it was in the first ones...the thing is that I didn't realise that there was this one here (*referring to Conservatives*) ...or maybe I saw it but I didn't stop...I read quickly, the Conservative party and I didn't realise it was there..."

Students' fast skim reading produced some interesting misunderstandings which are reflected in the following 3 examples:

1. Session 2

> "**St J**: Out of curiosity...but I thought that "*soft drugs*" were soft drugs...but here it says they are hard and dangerous such as marihuana
> **Tutor**: I think what it says is that "In MOST countries...and which are NOT considered very strong..."
> **St J**: Right! Now it's clear..."

2. Session 4

> "**Tutor**: What about Ulster Unionists?
> **St I**: Out of curiosity, to know on which side they were and I read that they were with the Sinn Fein."

3. Session 4

> "**St N**: Yes , Stormont...it sounded familiar. I think it was the peace process but it doesn't say anything
> **Tutor**: are you sure?
> **St N**: Let's see (*reads CN again*)....I'm not at my best today (*laughs*)."

Repeated consultation was also caused by skim reading the CNs too quickly and by other factors: some students misread the information the first time, or read only some part of it, or needed more details for the question or simply forgot what the CN was about. Student C in session 4 pointed out that he consulted *Lloyd George* and *Michael Collins* several times to be sure which parties they belonged to. Student G in session 2, for instance, was prompted by the question to consult *Release* again.

6.3.6 WHAT OPINIONS

Some students expressed their opinions about the design and usefulness of the CNs. In session 1 Student G said that as she was studying Business Studies, she liked the CNs *Treasury* and *Budget* because she liked knowing these technical words for her studies, and

Student B in session 4 expressed: "All of them, in fact they are very nice...apart from that, they were helpful...they are very interesting".

The CNs produced some sort of positive effect at different levels. They sometimes prompted students to relate the foreign socio-political situation to their own as we have seen above, in point 6.3.2, in the case of student N and the educational inspection system. In session 4 Student F also related the CN to her own background knowledge, although she decided to do it in the retrospective questions and not earlier while performing the task:

> "**St F**: Yes, nearly every note...I didn't consult Sinn Fein. I am going to do it now because I still have a doubt. (*reads CN*) It's like in Spain with *Herri Batasuna* and *ETA*.
> **Tutor**: Do you think that this note was relevant?
> **St F**: Not for the exercise but to understand the news item...what it was about."

Student F had the idea that the CNs were something extra which could not help her much for answering the questions correctly. However, in some other cases the CNs helped learners to infer new vocabulary, as is the case of student B:

> "**St B**: [...] in the description of the cultural notes about these three (*referring to NASUWT, the Association of Teacher and Lecturers, and NUT*) ...these three organisations I read the word *Union* in all of them....and one of them said that it did not allow headmasters to join...Well, it's quite clear then if there is an organisation where they don't want headmasters to join it should be a trade union."

Student B, of course, applied his culture-specific background knowledge to reach that conclusion, without knowing that in Britain there is also a union for headmasters. In other cases, the CNs prompted learners to look up words in the dictionary, such as student B in session 4 and the word "*oath*", or student O in session 2, trying to remember the differences between *private* and *public* school. The problem in that case was that student O knowing the difference admitted confusing something related to that, but couldn't remember what.

CNs, in general, had a good response from the learners' point of view since ease of access and their visual element caught the learners' attention. In session 1, sometimes by coincidence students realised the CNs were there, as happened with student D, and from then on she consulted nearly all of them.

6. 4 THE USE OF TRANSCRIPTS, SUBTITLES AND REPLAY CONTROLS

Transcript, Subtitles and Replay controls, which include play, pause, rewind and fast-forward buttons, are help facilities to assist learners in their decoding of the aural input. Thus our discussion will take into account the students' listening ability according to the classification outlined in point 6.1.2 and table 6.2 above.

6.4.1 WHAT and HOW: Preliminary considerations

Tables TSR in Appendix C describe in detail the frequency of use of the transcript, the subtitles and the replay controls. We have also considered the complete task process students followed in each listening section of the 4 sessions and the use of the decoding help facilities within them to provide us with a broader picture of their use.

The replay controls have been grouped in terms of the strategic function they performed in the decoding process. Therefore, in the tables TSR in Appendix C we have included the three main procedures that the replay controls allow:

	Decoding function
Replay	• Allows the learner to re-listen or re-watch the whole extract, obtaining more information from a previous listening or viewing.
Pause (or Stop)	• Allows the learner more processing time to decipher the last utterance or piece of the extract just played (before the next utterance comes up) • Allows the learner to perform another action, e.g. answer a question, etc.
Rewind (and Fast-forward)	• Allow the learner to re-listen or re-watch chunks of the extract to have repeated exposure to specific aural or visual input in order to decode the aural input.

Table 6.30 Decoding functions of replay controls

Due to the way students used the replay controls, the procedure we followed to count their frequency of use needs to be clarified. When we refer to *Replay*, we mean that students played the whole extract again as a strategy, even if they occasionally used the rewind/fast-forward or pause controls.

Regarding the pause, stop and rewind[1] controls students had various ways of using them. These can pose some problems in the counting of their frequency when students combined the two. To solve this, we have identified the students' procedures for using them and how they have been counted in the following table:

Students' procedure	Instance counted as
Click *Pause* → Read question or answers → Click *Play*	Pause
Click *Pause* → Rewind immediately	Rewind
Click *Pause* → Read question or answers → Rewind → Click *Play*	Pause and Rewind
Extract playing → Rewind → Extract playing	Rewind
Extract playing → Click *Stop* (→ Click *Play*)	Pause (and Rewind)

Table 6.31 Pause, stop and rewinding procedures

To rewind a piece of extract some students followed the second procedure (Table 6.30), i. e. pausing first as if it was a conventional tape-recorder. But some students also rewound it immediately without pausing (fourth procedure), which the computer allows you to do without hearing the distracting noise of conventional rewinding while the play button is on. (for an example of this procedure, refer to Appendix F, Student A, session 2 radio) Therefore, if there was no action between pausing and rewinding we have considered these as *Rewind* only. If, on the other hand, they read a question or answered it and then played it again but first rewound a bit, we have counted these as two actions, pausing and rewinding. As for the *Stop* control, we have counted this as *Pause*. However, as it automatically rewinds the recording to the beginning we have also counted it as *Rewind* if they listened to a piece of extract again or as *Replay* if they listened to the whole extract.

[1] For clarity purposes from now onwards in the discussion we refer to *rewind* controls or *rewinding* to include also the fast-forward action and *pause* to include the *stop* control.

6.4.2 WHAT and HOW MANY TIMES: Transcript, Subtitles and/or Replay Controls.

Tables TSR in Appendix C detail what students used in order to assist them in their listening task, and their frequency of use for each session and each section, general comprehension question (GC) and detailed comprehension questions (DC), in the case of sessions 2 and 4 and only the latter for session 1 and 3 since students had the radio and television news items as Second encounter.

The use of the decoding help facilities rarely occurred in isolation since in most cases students needed at least to use the replay buttons to perform their listening task, although in our data (Tables TSR4a and TSR4b) we can observe that student R in session 4 decided only to watch the television news item once and then completed the two exercises without any replaying or rewinding. Commonly, then, the extra decoding help mostly comes from the transcript or the subtitles and thus we basically focus our discussion on the use of these two facilities, but, of course, we also consider them in relation to the replay and rewind functions.

From a language teacher's perspective it seems logical to think that students who are poorer decoders would rely more on visual decoding help, such as the transcript and/or subtitles, when doing the task, and that higher decoders would use those facilities less often because they are more able to follow, in our case, authentic aural input.

Considering the decoding level of students in groups as illustrated in Table 6.2 above, Higher Decoders (HD), Average Decoders (AD), Lower Decoders (LD) Poorer Decoders (PD), and analysing Tables TSR in Appendix C we observe that students within each group behaved in varied ways regarding which decoding help was used most often, but there seems to be also some slight trends which we now consider.

Table 6.32a below illustrates HDs' use of the decoding help facilities before and while doing the listening or viewing comprehension tasks of the four sessions. As we want to observe which of those facilities students preferred while doing the listening exercise, the use of these facilities in the feedback section of the students' tasks is not included (and subsequently in Tables 6.32b, 6.32c and 6.32d).

HD Students	Sessions	Tran	Subt	Repl	Rew/ Pause
Student N	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student P	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student R	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student U	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				

Table 6.32a Higher Decoders' use[1] of the listening help facilities

HDs tended to use the *replay* and *rewind/pause* procedures more rather than the transcript and/or the subtitles. In fact students N and U did not use the transcript or the subtitles at all in the four sessions. They exclusively relied on the aural input to do the exercise. Student N reported: "I don't like using them, I don't like listening and reading at the same time, it distracts me". Student R only used them in session 2 and student P used the subtitles although she mostly relied on the replaying strategy. As she commented: "I only used the subtitles to get words that I didn't manage to get" (refer to Table TSR in Appendix C for actual details of their use).

ADs also seem to rely on the decoding facilities of *replay* and *rewind/pause* as shown by the darker cells on the right side of the table 6.32b below, although the instances of using the transcript and subtitles is higher and more prominent than the HDs, as it is the case of student D. There is also an AD who never used them, such as G, and student B who only used them briefly in session 2 and 4.

[1] Frequency of use of one facility over the other is indicated by different colour grading: *darker cells* mean that the help facility was used as the student's main decoding help, *lighter cells* mean it was used as a more subsidiary help and *white cells* mean that it was rarely used or not used at all.

AD Students	Sessions	Tran	Subt	Repl	Rew/ Pause
Student A	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student B	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student D	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student F	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student G	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student J	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student O	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				

Table 6.32b Average Decoders' use of the listening help facilities

Student A relied on the subtitles to back up his lack of understanding from the replay or rewind/pause procedures. Students J also used the transcript and the subtitles facilities as a backup but only in session 3 to his habitual replaying and rewinding in the rest of the sessions. Students D and F used the transcript or the subtitles in the first three sessions and decided to do the exercise without their help in session 4. Similarly, student O relied on the transcript in session 1 but then in the following sessions he stuck to replaying and rewinding. One possible explanation for this change of behaviour is the effect that the retrospective

interview had on some students in their subsequent sessions. This issue is discussed further in section 6.4.2.

With regard to LDs (Table 6.32c, below), the prominence and frequency of transcript and subtitles use is higher than the ADs and the HDs. Only student M, however, never used them while doing the exercises.

LD Students	Sessions	Tran	Subt	Repl	Rew/ Pause
Student E	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student I	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student K	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student L	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student M	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student T	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student V	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				

Table 6.32c Lower Decoders' use of the listening help facilities

Student I used the transcript only once and the rest of the time only the rewind/pause facility. He did not even replay the news item, and thus did superfluous work in understanding the

aural texts. Student K has similarities with student O above, in that they both used these facilities in the first session and then relied only on the assistance of the replay controls. Students L , T and V are the ones who used the transcript and subtitles more often than the rest of the LDs. The main reason for that can be explained in the light of the fact that these students may need to resort to visual stimuli in order to cope with authentic aural input.

At the lowest decoding level, the PD could be divided into two groups: student C and H who never used the visual scaffolding of the transcript and the subtitles, and students Q and S who based their listening comprehension work on them, sometimes as if they were doing a reading task instead of listening.

PD Students	Sessions	Tran	Subt	Repl	Rew/ Pause
Student C	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student H	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student Q	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				
Student S	S1				
	S2 GC				
	DC				
	S3				
	S4 GC				
	DC				

Table 6.32d Poorer decoders' use of the listening help facilities

It should be noticed, however, that student S changed her behaviour dramatically after session 2, after a discussion about the use she made of them in the retrospective questions. In contrast, student Q did not change his behaviour after a similar conversation in session 3.

In general terms, the hypothesis that higher decoders may use the transcript and subtitles less frequently and the poorer decoders more is not always the case in our sample. Although there seems to be a trend, there are other reasons which surely influenced this diversity of approaches within each group. In all the above groups there are students who never used the

transcript and the subtitles and there are also students who used them substantially more than the rest of the group. Furthermore, in each group with the exception of the HDs there are students who are used to the visual support and without the transcript or the subtitles they feel at a loss. Probably the difference between the groups in our sample, then, lies in their perceptions of the purpose of the transcript and the subtitles. In the two higher level groups students, in general, tended to perceive and use them more as a backup to their listening activity, whereas the other two groups considered them as a more necessary tool in their understanding of the authentic aural input. However, we cannot postulate that this is always the case. From the summarised data illustrated in the previous tables in this section and the retrospective questions we could propose that the language level may have had some influence, but the perceptions and beliefs students had about how a listening task should be performed, the way learners approached the task, their individual learning styles and their feelings towards a listening task in general also had a decisive influence. All of these factors are revealed in the different examples presented throughout this section.

Preference for subtitles was reported on various occasions and was dependent on when students used them (discussed in the next section, 6.4.2) but was also due to the intrinsic nature of them and the perceived purpose of their use. Student Q session 1 explained his preference in the following terms:

> "**Tutor**: Why did you prefer the subtitles to the transcript?
> **St Q**: Because the subtitles help you to follow at the same speed as the listening...In this sense, I found them more "useful" for a listening activity.
> **Tutor**: But wouldn't it have been more useful to use the transcript to check a particular point?
> **St Q**: Well,...yes, but with the subtitles you can work on the correspondence between the written and the spoken words"

This student wanted to solve a specific problem and may not have thought of using the transcript for that purpose. We should point out that this instance happened in session 1 when students were not familiar with the program. The question of choosing the subtitles in another case was due to the fact that student B was familiar with it:

> "**St B**: Because I wanted to listen and at the same time see it written down. Moreover, because I'm used to...Well, I like, when I can, watching English films subtitled in English. I can then follow it identifying the words. This is what I did here. It helped me."

The last example uncovers the oft-discussed issue of transfer of skills and strategies from one context to another regarding subtitles. Films are not in the same context as news, in that news items are rarely subtitled, but for student B, and his learning process, both are

perceived as good tools to improve his listening skills regardless of the context and the authenticity of the activity.

If we analyse across Tables TSR in Appendix C we observe that students used the subtitles more than the transcript in sessions 3 and 4 while doing the exercise than in the first two sessions. This result is easily explained by the fact that in the last two sessions the listening activity was based on video. The main reason, then, was that the subtitles allowed the students to follow the images from the TV screen since when using the transcript the window where this is included covers nearly all the video screen. Thus 6 students opted for the subtitles and 1 for the transcript (partial consultations of the transcript are not included here) and in session 4 there were 6 students who used the subtitles, 2 of whom also used the transcript and 1 student who used this facility only.

Some students, however, approached the use of decoding help facilities from the another perspective and the result was that they did not make use of the transcript and/or the subtitles while doing the task. Even using the facilities of rewind and pause were seen as a problem "because in real life I can't do it" as student G mentioned in session one. Student G, however, resorted to that facility quite regularly in the 4 sessions being one of the students who used these controls most frequently (see student G in Tables TSR in Appendix C). Student M in session 1 was also concerned about the use she started to make of the rewind and pause controls:

> "**St M**: [...] when I started to rewind it was because there were some bits I didn't manage to understand, but then I thought that it was better to do it without stopping...you know, in a "normal" way (*meaning authentic*).
> **Tutor**: Why do you say "better"?
> **St M**: Because...Isn't it listening comprehension? So that's it, isn't it? If you pause and rewind...it isn't...people who are going to speak in English to you...you won't be able to stop them and rewind...
> **Tutor**: You mean...you wanted to do it as authentically as possible.
> **St M**: Yes...to listen first, try it without and then listen to it in detail."

The *Replay* procedure was used by students, such as student H, U, and N among others who basically approached the task in a more global way, being less concerned with the minor details or who were confident in what they understood. They were content with not understanding everything, which did not cause any stressful effect. For instance, student J in session 2 explained:

> "**Tutor**: Did you rewind?
> **St J**: No, I listened to it 3 times, what happened is that in some parts I paused to think but I didn't rewind because I was pretty sure about it, when I started listening, from the ones I answered, I was pretty sure, then the ones that I was not sure,... well, I caught quite well what they said and then when I paused I preferred to think a bit. I didn't see the point to repeat it again. I had already caught it or thought I had already caught it, of course."

This comment reflects the basic function of the *Pause* procedure as outlined in Table 6.30 above. Student J used the pause to allow him thinking time to process what he had last listened to, and then to match it to what was stated in the question.

Students who never used the transcript while doing the exercise such as students C, G, and U provided similar reasons as the one by student H in session 1:

> "**Tutor**: Did you use the transcript or the subtitles?
> **St H**: No, because if you are doing a listening task, I don't like using the transcript, then it would be a reading activity. If you read, then you're doing a 'reading'."

This opinion contrasted with some students' use of the transcript in that they were actually performing a reading activity when the intended activity was a listening task. (see discussion in next section 6.4.2)

The learner training information about the transcript and the subtitles before the listening activities was rarely consulted (6 students in session 1, 1 in session 2 and 3, none in session 4, see Tables TSR, column INFO) and most of the time students did not read that information but skimmed it rather quickly. Student A, for instance, found that information useful as she followed the first suggestion provided in the *Subtitles use* section of the program. On the whole that information had little effect on the students.

Apart from the help facilities mentioned above there are two other indirect ways which assisted students in decoding the aural input: the questions and the images in the television news items.

All the students followed the detailed comprehension questions as their visual reference to identify and sometimes help them actually decode the aural input, as we have already exemplified at the end of section 6.2.1 (student G's comments). Another instance, for example, taken from the retrospective interview was in session 4 student J, who realised that the questions were not exactly in the same order as the aural text:

> "**Tutor**: Do you think that the questions helped you to catch things?
> **St J**: Yes, although I couldn't get the sense of some questions...it was the beginning and I listened to things from the middle. I thought they were not so ordered this time."

Or student P who described it very clearly in session 1:

> "**Tutor**: How did you work?
> **St P**: I opened the questions and started listening. I was listening and following the questions...well, what they were saying that refers to that question. I was trying to identify...mentally in order not to waste time. First I was mentally identifying and then I answered them when I finished listening."

Following the questions to assist decoding was closely related to the rewinding procedure. Student M, describing her reasons for rewinding in session 3, mentioned the following:

> "**St M**: Because I didn't understand. [...] I could have been rewinding till 7 in the evening. But after reading the questions I managed to identify them, and there were some that I didn't manage to get them completely so I rewound that bit."

It was clear, then, that students were most of the time trying to find "pattern matchings" of words from the questions to the listening input. Student N commented on that fact in session 3 when she realised that the words "boring, old-fashioned and not paid enough" were not mentioned but others, *nerdy, underpaid* and *dull*, which she could not identify all. In fact, the design of some of the detailed comprehension questions led somehow to that "matching procedure" and caused students to rewind to try to identify specific vocabulary.

> "**Tutor**: Why did you rewind?
> **St N**: Because I couldn't catch those words...well, they say them but they are very different from the question and I wanted to get the meaning of the sentence...in any case I didn't catch them either (*laughs*)."

Therefore, students followed the questions while listening, obviously, to answer them but also to try to guide them to decode the aural input.

The other indirect decoding help to be discussed is the visual element of the images of the television. Few learners reported using these as a means of decoding the aural input. All of them, however, thought that these were generally helpful in the viewing comprehension of the text as a whole. This fact was less reported because it may have worked at a more subconscious level. In Session 4, for example, some students noticed the photos of Tony Blair and Gerry Adams behind the newsreader at the beginning of the news but student K, for instance, did not realise that the word *protest* was there as well. In her case, noticing those images might have helped her to answer the general comprehension question correctly

the first time, and most importantly, to understand what the news item was about more rapidly. Curiously, student T, however, noticed the word but not the photos. Student M noticed both things behind the newscaster and students L and N realised they were there when talking about the images in the retrospective questions. This fact reflects that most students in our sample lacked strategic awareness of using the images in order to assist them in their viewing comprehension. Besides, when students watched the TV news item with subtitles, they were not even considering the images. Student V showed that problem in session 3 and replied:

> "**Tutor**: Do you think the fact of using the subtitles prevented you from paying attention to the images?
> **St V**: Yes…sure because I was following what they said."

On the other hand, there were some students who used the images to benefit their understanding. Another aspect that helped students in their viewing comprehension is the paralinguistic elements of the audio-visual input. Some students, such as student D, even noticed, for instance, that one of the students in the news item in sessions 3, moves her head laterally to signify *no* and thus she managed to infer that she did not like the advert designed for the teaching campaign. We should point out that most students in the sample found them difficult to follow. Not many students used the images in that conscious way and most times took them for granted. Students were not consciously using them or taking as much advantage as possible of their information. Images operated at the students' subconscious level since the students' main concern was to understand the audio in order to answer the comprehension questions. Student R also paid attention to paralinguistic elements of body language in session 4: "the expression of the Prime Minister, his body language when talking to the crowds in the street…". This sort of details was reported more frequently by students who had no difficulties in understanding a particular aural input such as student R or who perceived themselves as visual learners such as student D.

6.4.3 WHEN and HOW: Assisting the Decoding or Using Other Skills?

If we consider our sample as a whole, we observe that students preferred to use the subtitles to the transcript before and while doing the questions. This is illustrated in Tables TSR1a, TSR2a, TSR2b, TSR3a, TSR4a, and TSR4b in Appendix C. Preference for the subtitles over

the transcript is an issue which is closely related to the issue of "*reading temptation*". As Student A in session 1 mentioned: "I thought that between the transcript and the subtitles, better choose the latter. I prefer them, instead of having all the text,...because I have the temptation of reading the text. So, I chose the subtitles. At least, I do some listening...try to listen to it and if not (*meaning not catching the words*)...look at the subtitles". The reading temptation comes naturally from the fact that students once they accessed the transcript while doing the listening activity had the whole text to overcome the stress of not understanding. Student B in session 4 for instance said:

> "**St B**: I used the transcript to see the word "hecklers" that I didn't manage to catch...I caught a stream of sounds that I didn't recognise, which were not doing any "pattern matching" with anything in my mind. Then I checked it and as I had it there, I decided to read the whole paragraph."

Students, in general, did not feel so guilty about using the subtitles while doing the exercise since they had the impression that they were at least doing a listening activity. In the majority of the cases the transcript was reserved for more particular aspects, e.g. to check the spelling of a particular word in order to look it up in the dictionary. Some students, however, used it while doing the question with the result that they were actually doing a reading activity rather than a listening one, since they were answering the questions from the transcript. One example of these is student T in session 1:

> "**Tutor**: Why did you use the transcript with the questions?
> **St T**: Because I was in a no-win situation (*laughs*) Because I thought before answering "Don't know" I prefer to do the exercise even if I was reading."

From the Tables TSR in Appendix C which illustrate the students' task process we can identify the students who used the transcript to answer questions (procedure 3F in sessions 1 and 3, and procedure 6F in session 2 and 4). Students O and D from the AD group, students K, L and T from the LD group and students S and Q at one point or another in the four sessions use the transcript while doing the questions, thus they were exercising more their reading comprehension than listening.

The retrospective questions made some students think about this issue and then change their behaviour in their subsequent sessions, as student D, for instance in session 3:

> "**Tutor**: Did you do a listening or a reading activity?
> **St D**: a reading one (laughs)...
> **Tutor**: Were you conscious of that?

> **St D**: Yes...I was but the thing is...it's easier. I know, I would have had to try to do more listening but with only listening I would have been here 25 hours...Well, I'll try it next session."

And she did, as illustrated in Table 6.32b above, relying on replay and rewind/pause procedures.

Student K, for instance, explained her overuse of the transcript as follows:

> "**Tutor**: When did you use the transcript?
> **St K**: Before the questions several times and also with the questions because I knew that I would have answered the questions without really understanding and then I wouldn't have got any correct...[...]
> **Tutor**: What do you think you did: a listening or a reading activity?
> **St K**: I di... (*laughs and thinks*) well, honestly to answer the questions I did a reading activity.
> **Tutor**: But that was designed to improve your listening, don't you think?
> **St K**: Yes (*laughs*)...well, the thing is that if you have the opportunity to use it,... you always have the feeling that you don't get everything you listen to...."

The above students were prompted in the interview to realise the fact of their using the transcript in a different way from the one intended by the designer. Student O, on the other hand, recognised it by himself:

> "**St O**: I listened to the radio first with the transcript.
> **Tutor**: Why?
> **St O**: To catch it better...to catch better what they were saying...Afterwards, I closed it down because I realised that the exercise was about improving your listening, isn't it? And not reading what you are listening...so it would have been better to listen to it first and then check the transcript..."

Some other students such as, A, B, F, J and V also used the transcript in this way but only once or twice to answer a particular question or to check a word which they were unable to identify but thought was relevant to answer one of the questions.

One of the factors that influenced the students' use of the transcript in that "unintended" way from the designer or teacher's point of view, was that students reacted due to the common I-don't-understand-anything syndrome causing some sort of "*panic attack*" where they could not think of the drawbacks of using the transcript in that way. They usually wanted to solve the problem, thus the subtitles or the transcript were the effective vaccines to immunise against this kind of attack. Here are two examples of "*decoding panickers*": Student T in session 2 admitted:

> "**St T**: The first time, it was all Greek to me. Before I started I thought what I was going to do. Should I read it first and then listen or try to get what I listen to and then read? I thought to try to see how much I could catch cold...and then I said, no way (*laughs*)."

Student S was the only student in session 1 to do the first listening with the subtitles, (process 1C in Table TSR1c) and then in session 2 she had a similar reaction to student T above:

> "**St S**: You see, a listening activity without visual support makes me anxious. If I don't have a visual support, or if I don't take notes...I get lost... [...] if you really want to practise listening what you have to do is to listen and take the life belt off. What I do is to swim with the life belt all the time. The problem is that you have to be brave to dive into the swimming pool without the life belt...so one has to take the risk and see what happens."

In sessions 3 and 4 student S decided to take her *life belt* off and was very proud of herself for managing without drowning. Her comments hint at another important factor in the decoding of the aural input, learner style. Students such as S perceived herself as a visual learner and thus needed that support. Similarly, student D in session 1 commented about her use of subtitles: "I have the sensation that I retain it more at the visual level than at the auditory". The issue, however, is to train these students not to panic at first, and then work with the visual support at the end, if needed, in the feedback section. It is there when they can rely on the visual element to analyse where the error came from, in terms of vocabulary, grammar, accent, etc. This strategy was followed by some learners who basically used the transcript when they were working on the feedback of their answers.

The use of the transcript and subtitles when doing feedback or at the end of the session is illustrated in the Tables TSR which describe the students' task processes. Thus we observe that in session 1 students H, K, S, V checked the transcript when doing feedback, and only student M listened to the whole extract using the transcript (processes 5C and 6B in Table TSR1c).

In session 2, students B, D, O, S, checked the transcript when doing feedback (process 8C in Table TSR2d), student M repeated the same procedure as in session 1 (process 9B), student F only read the transcript after working on feedback (process 9C in Table TSR2d), and student N also checked it but only to see the spelling of a couple of words after the retrospective interview.

In session 3, student F was the only one reading the transcript while doing feedback (process 5C) whereas students E, K followed it while listening[1] to the TV news item. (process 5F).

[1] Note the use of verb *to listen* in here to indicate that students could not watch the TV news item since the transcript was covering part of the TV screen. Therefore, the task consisted of listening and following the transcript.

Student M was consistent in her way of working and after the feedback, she listened to the TV item with the transcript on top. So did students O and U who also took some notes of several words. Student L used the subtitles first, then the transcript while doing the feedback (process 5E and 5F respectively), and afterwards watched the whole news item with subtitles and ended the session by reading the transcript and taking some notes. Student L preferred to do intensive work after the exercise to try to see where his difficulties were in that text.

In session 4, student L listened to the TV following the transcript and then read it and student N checked it while doing feedback without listening. At the end of the session, students E and K watched the news item with the transcript, as did students M and U, who also read it afterwards.

Taking into account the feedback procedures using the transcript and/or subtitles throughout the 4 sessions we can conclude that except for student M who was consistent in her way of working, the rest of the students varied their feedback and post-feedback procedures. The main reason for this variation may be traced on Tables TSR in Appendix C where we can observe the general overview of how students approached their tasks. Therefore, the process a student followed to perform the listening task with or without the help from the transcript or subtitles may have had an effect on the way students ended the session. Thus if we take as an example session 3 (Table TSR3c), we notice that there are students who used the transcript or subtitles several times during the exercise who then did not use them on the feedback, such as student J or T. Whereas others, such as K and L did not use them while doing the exercise and decided to do more work in the feedback and post-feedback sections of the session, using them to self-assess and self-monitor their performance.

Moreover, we observe that for learners who generally worked at a more detailed level while doing the exercise, such as student A or B, their feedback was restricted to checking the answers and explanations. Meanwhile, students such as M and P who approached the task in a less detailed way, then did more intensive work in the feedback. Furthermore, some students may have made a conscious decision against using the transcript or subtitles while doing the exercise after having done it previously in the "unintended way". Student K reported in session 2:

> "**St K**: [...] today, I came with the idea of not using them.
> **Tutor**: Do you think that the transcript may be useful at the end of the session?
> **St K**: No, I don't think so...because the explanation gives you the answer. I listened at the end to catch it better...especially number 7, that one I didn't manage to catch"

It is interesting to note that in session 3 she decided to use the transcript at the end to do the last checking although her first checking was to follow the explanations watching the TV news item.

No relation as far as the results are concerned was found in the data since there were students who made a high percentage of incorrect answers and then just checked the explanations. Other students who obtained fewer incorrect answers decided to perform a post-feedback activity using the transcripts or the subtitles, or simply to listen to or watch the whole news item again. Factors of tiredness, lack of interest or time constraints mostly influenced that decision. If we observe session 3 in Table TSR3c of Appendix C, 12 students just checked the explanations (process 5A) and ended the session, whereas 10 watched or listened to with the transcript, the whole or some chunk of the TV news item again. Comparison of feedback procedures between the sessions will be further discussed in section 6.5.

6.4.4 HOW

In this section the different procedures of using the help facilities for decoding aural input will be described.

Regarding the *rewind/pause* facilities we notice in Tables TSR mainly two types of students. Students who paused and rewound moderately specifically at moments when they did not catch some information, were students F, H, N and U. In these cases, students re-accessed longer units or they simply preferred to replay everything without much rewinding, as is the case with student D.

In contrast, students who are classified as "*compulsive rewinders*", such as B, C, G and T in all four sessions, were rewinding many times to catch as much detail as possible. In those cases, smaller units were preferred to that of longer chunks. We should point out that there are other students who also rewound many times, but it was only at a particular instance in

one of the sessions. It is interesting to note that the four students identified were also part of the *compulsive consultors* group since they looked up a higher number of words and consulted a higher number of cultural notes.

It is true that these *compulsive rewinders* were even more bound to using the rewind/pause controls prompted by the type of detailed comprehension questions posed. Student G in session 3 answered the following when she was asked about if she needed to rewind: "Yes, many times, because I understood it but there was the typical key word to answer the question that I didn't catch. You have to rewind it a thousand times...maybe, you manage but sometimes you give up because you don't manage to catch it". Even students who approached the task in a more global way, they used the *Replay* procedure, such as student H, who in session 2 commented:

> "**Tutor**: Did you rewind?
> **St H**: Yes, but not in the general one. I did in the detailed question to answer some... the questions induced me to rewind...the third time I didn't, either."

Therefore, these students showed in the three help facilities so far described a characteristic behaviour: devotion to detail and thus to consult regularly. In sessions 1 and 2 students B and G both called the *Display* facility of the radio console to be able to see the counter and be more precise in their rewinding. Student B even used the arrow keys of the keyboard instead of the mouse to have more precision.

In the following Table 6.33 student A's screen actions are described to observe the process she was following in session 1 when she retrieved the exercises, and how she managed to use the rewind, play and pause controls:

	ON SCREEN	OFF SCREEN
	[...]	
	∇ clicks Exercise Icon ⇒ Detailed comprehension qs. download (1-5.1)	∇ reads instructions
		∇ reads qs. (1/2?)
	∇ plays [The government... ∇ pauses ...an extra]	∇ listens to the extract
	∇ plays [an extra 300 million pounds... ∇ pauses ...doctors' leaders]	
		St: "*If I want to rewind... can I do it?* T: *Yes, you can. Here (pointing to user's guide button on the screen) tells you how to do it.*"
	∇ rewinds ∇ clicks User's guide on left margin ⇒ User's Guide downloads ∇ closes User's Guide ∇ clicks Exercise icon ⇒ Detailed comprehension qs. download	∇ skim reads user's guide
	∇ plays [waiting lists. The news has... ⇒ ... managers] ∇ rewinds to beginning [The government... ∇ pauses ...the news has been welcomed] ∇ rewinds ∇ plays [the money which is in addition ... ∇ pauses ... the service. As our Health]	∇ listens to the extract
	∇ moves mouse over q2	∇ reads q2
	∇ rewinds to beginning ∇ plays [The government... ∇ pauses ... by doctors' leaders]	∇ listens to the extract
		T: "*Which is the problem?* St: *the vocabulary* T: *from the question or the text?* St: *I understand the question. What happens is that once I have listened, you see...that maybe he says it with similar words but I don't identify them.*"
	∇ moves mouse over q1	∇ reads q1
	∇ rewinds to beginning ∇ plays [The government... ∇ pauses ... the Prime Minister was keen to]	∇ listens to the extract ⊗ reads qs. (?)
	∇ moves mouse over q4	∇ reads q3 & q4 (?)
	∇ plays [the significance of the investment... ∇ scrolls qs. down (5-9) ∇ scrolls qs. up (2-8)	∇ listens to the extract
	∇ moves mouse over q4	⊗ reads q4
	∇ answers q4 FALSE	
	∇ follows q5 with mouse	⊗ reads q5
	∇ answers q5 TRUE	
	∇ moves mouse over q6	⊗ reads q6
	∇ pauses ... in 3 days the extra]	
D	∇ clicks Dictionary on left margin ⇒ dict. window pops up (main page)	
	∇ clicks Merriam-Webster	∇ waits a little for dict. to download [...]

Table 6.33 Students A's on and off-screen actions in the radio section of session 1.

After reading the article, student A listened to the radio news item twice, the second time with subtitles, and then decided to start doing the exercise. We can perceive in Table 6.30 above that at the beginning she did not read all the questions, possibly question 1 and/or 2 since she did not scroll the question page down. She then started listening to the extract and realised that she needed to rewind. Therefore, she paused the recording and asked the tutor. She was not sure about rewinding and the tutor indicated to her where to find the information. When that was sorted out, she rewound to the beginning and started listening. A couple of times she paused and rewound the beginning of the extract to try to match question 2 and aural text in order to answer. She then reread question 1 and rewound the extract to the beginning and started listening again. Student A then paused to read question 3 and/or 4, played the extract and started reading the questions, and answering some while listening to the extract. It is interesting to note that she did not read all the questions first and therefore she went straight to the task. Thus at this point she was cognitively overloading her task since she was to read questions which provided new information, plus listen, plus answer some of them. Student A, however, could cope with that cognitive overload as is also reflected in the On and Off screen actions of session 2 included in Appendix F. On the other hand, there were students in our sample that imposed on themselves some cognitive overloads and did not manage.

Another example of self-imposed cognitive overload when doing feedback was when student K in session 4 decided to watch, and check questions and read the transcript at the same time. She wanted to find out what she managed to catch and what she did not, but at the same time to check the questions: "I didn't manage to follow (*the aural input*) and I didn't manage to follow the transcript at the beginning either...then I decided not to look at the questions because when I looked at them I was already lost".

With regard to the subtitles and the ability to follow them, student A, for instance, managed perfectly as she was using a selective strategy of using them as back-up. She commented in session 1:

> "**Tutor**: Were the subtitles too fast for you?
> **St A**: No. Besides, when I was watching the subtitles, I didn't watch it all. What I mean is that I looked at the odd word that I didn't get or an expression that I didn't catch. Briefly, I didn't watch them word by word."

And in session 4 as she had the added factor of the visual images, she used the same strategy:

> "**St A**: ...I was listening, watching the video...when I saw that I didn't catch something, I watched the subtitles and listened. When I watched the word that I hadn't caught then I went back to watch the video...till the next one. I was alternating subtitles and video."

On the other hand, there were students, such as student D, who found it difficult to follow the subtitles in session 1:

> "**Tutor**: did you manage to read the subtitles?
> **St D**: No I didn't manage to read everything. They were too fast ...but I identified the words that I didn't manage to catch just listening."

An important issue should be addressed here in that there are students whose reading speed is slower than the subtitles and thus they can only be of limited help. Students in the sample who could not cope with the speed could have been distracted by that fact, defusing concentration in the aural input. Some students, therefore, decided to concentrate on the aural input leaving the subtitles running but not following them, simply checking from time to time. Subtitles, on the other hand, could serve as a tool to exercise speed reading and at the same time, practise sound-written form matching.

Most learners coped with the technical problem of synchronisation between aural input and subtitles scrolling along, described in Chapter 4. The reason for students being a little bit lost may have been due to their slow reading speed but in the majority of instances students manage to synchronise them, as student E reported:

> "**St E**: well I was reading and listening...checking the text. Even doing that I did not catch it all.
> **Tutor**: Did you manage to synchronise it?
> **St E**: In some instances I got lost but then I stopped it and kept on..."

Regarding the transcript and the TV screen, some students tried to answer questions when the transcript was opened, but as described in Chapter 4 section 4.6.3, the program did not permit them to perform that task. Student L described in session 4 how he worked with the transcript and what happened:

> "**St L**: [...] I went to see the questions...I tried to answer some, the ones I remembered and the ones I didn't manage I went to check in the transcript.
> **Tutor**: Why did you do that?
> **St L**: You mean what happened with the three things at the same time.
> **Tutor**: Yes. How did you work?
> **St L**: (*laughs*) well, the main focus was the TV and the questions. I used the transcript as a complement....and when they got, for instance, to the point that they are talking about question 5....then I stopped....and then went to the paragraph. I was following the question and when something was mentioned that I didn't catch, I stopped and then went to the transcript to find out that what I had listened to was

> correct and in order to answer the question. Then what happened is that I had the transcript window open and the program didn't allow me to answer. Then what I did was to stop and close the transcript window. I answered question 5 and opened the transcript again. As I couldn't stop every time I thought, well, better watch everything following the transcript scrolling it down, and when I finished I answered nearly all the questions, 6, 7...except one or two that I answered with the transcript."

The interesting thing in this example is that student L could not understand why this was happening and thought that it was an error or malfunction of the program. He realised later in the retrospective interview the reason for that limitation while the transcript was opened.

From the designer and teacher's point of view it was unimaginable that students could have chosen to go through so many steps, which made their work process awkward, to have the transcript available for answering questions. The fact that students followed this path shows that they were displaying features of a typical "*decoding panicker*" or simply were unaware of the basic function of a listening task.

Taking into account the process across the four sessions we can observe that some learners followed predetermined patterns of behaviour in the use of these decoding facilities, which changed relatively as is the case of students G, H, M, P and U. Some students' patterns, however, changed dramatically as they experimented with new ways of working, such as student S, other students changed their approach after session 1, such as students K and O and finally, other students, such as student L, used a different approach in each session. The positive thing about **ImPRESSions**, then, is that it catered for all this variability of approaches.

6.5 THE USE OF FEEDBACK

In this section the use of the feedback is described taking into account both how students use it and their reactions to it. The discussion considers the sample as a whole. The most common patterns of the use of the two types of feedback described in Chapter 4 are outlined in the following two sections.

6.5.1 HOW: Immediate feedback

Students received immediate feedback for the general comprehension question, which was a multiple choice. Students responded to that in three different ways:

- They re-accessed the text again before trying another option
- They chose another option straight away
- They thought about the alternative and chose it

It was noticed that a large number of students re-accessed the listening texts more frequently than the articles, generally following one of the last two procedures described above. This may well have been due to the fact that some students did not follow the skimming activity in the reading task as it was intended (students had only two minutes to skim the text) and re-accessed the text lots of times in order to read it in detail. Thus when doing the general comprehension questions they had already done the re-reading, and therefore, when they did not manage to answer it correctly they did not go back to the article again and try another option.

It was noticed that most students when they obtained the correct answer, skim read the feedback message quickly or simply read the *That's correct* message, without paying much attention to the sentence explaining why that option was the right one, as illustrated in Appendix F where the On and Off actions of student A in session 2 are described. In that sense, observing students working I gained the impression that if some students had paid more attention to the explanation, they would have been more prepared for the subsequent activity, especially the students who selected the correct option first time. The fact that they may have chosen the correct one by chance could have been solved by reading the explanation about why that answer was correct. In some instances we observed that students went directly to do the subsequent activity without really understanding what the news item was actually about. All the students who did not manage to answer the general

comprehension correctly the second time, however, selected the last option in order to read the feedback provided.

6.5.2: HOW: Delayed two-step feedback

The feedback mechanics of the detailed comprehension questions allow for what we call the "delayed two-step feedback". In other words, students click the *Feedback* button and obtain the results and which questions are correct and which are incorrect, and then they have to click the *Explanations-of-the-wrong-answers* button down in the middle of the page to obtain that information. This two-step mechanism provides certain flexibility to adapt to different approaches of self-assessment as described in this section.

The most common procedure is the one followed by student A illustrated in the On and Off Screen description in session 2 radio in Appendix F. After clicking the Feedback button and reading the results (7 correct answers out of 9) student A scrolled up to see which of the answers were wrong (unticked boxes), observing at the same time that she answered one of the questions she had doubts about correctly (ticked box). Then she continued by scrolling the page down to the *Explanations* button and clicked it. Thereafter she scrolled the page down to read the explanation of the first wrong answer, after that she scrolled it down again to the second explanation, and read it. After reading the explanation she scrolled up to the corresponding question to read it. She alternated reading the explanation and the question, scrolling up and down. Student A did not understand why it was wrong since she did not realise where the source of error was. The tutor had to intervene due to her comments pointing out the capitalised word in the explanation and finally she understood where the error was.

This common procedure is also illustrated in Figures 6.3 below where students read the results and evaluation (Figure 6.3a), then scroll up to the questions to see if the boxes are ticked (Figure 6.3b), after that scroll down to the Explanation button, click on it and scroll down to the explanations of the incorrect answers (Figure 6.3c) and finally read the explanation and/or scroll up to check the question (Figure 6.3d) in order to compare question-explanation. This feedback process shows two procedures followed by the majority of students in our sample: the first one was just to read the explanation(s) and the other to alternate explanation and question to find out the source of error.

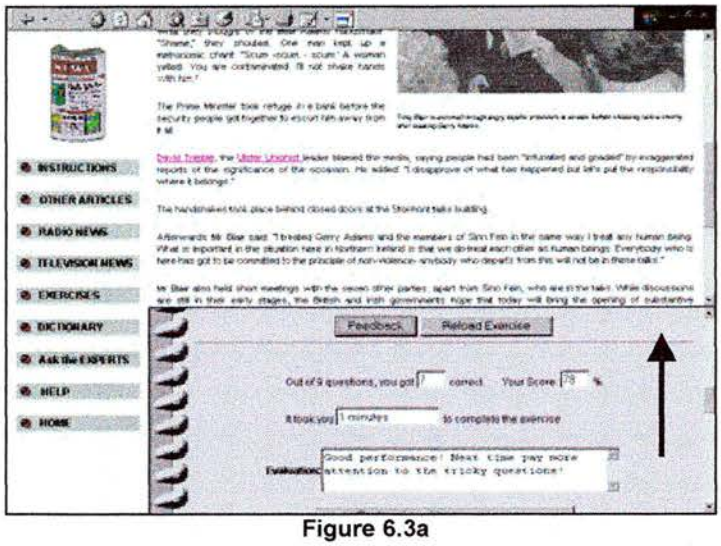

Figure 6.3a

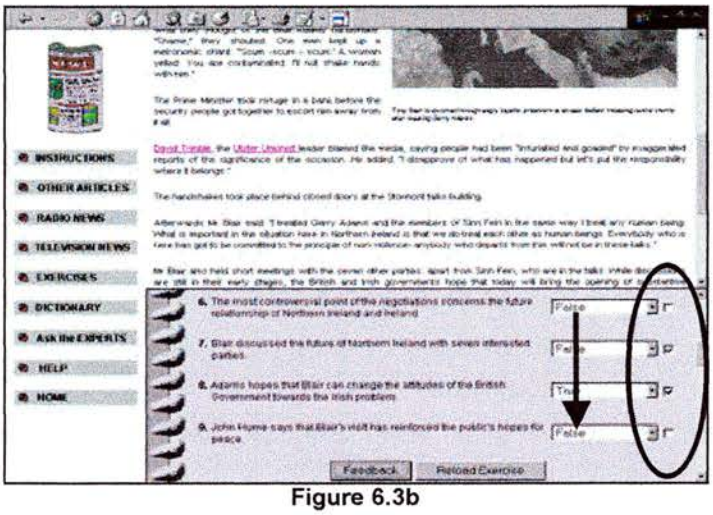

Figure 6.3b

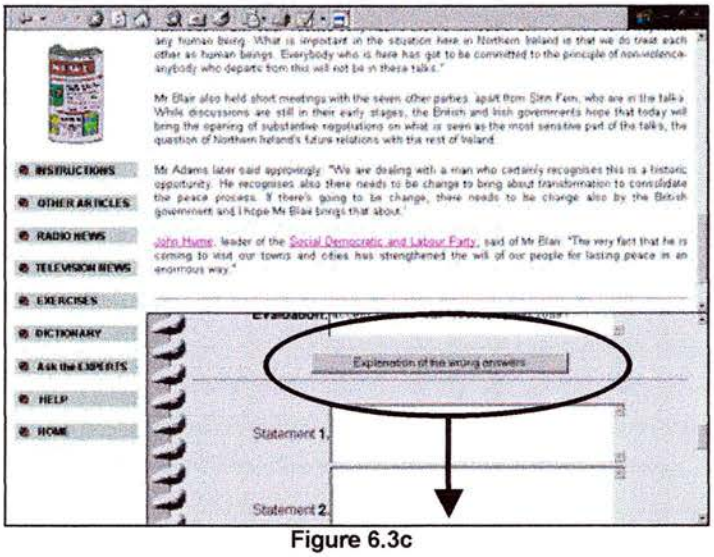

Figure 6.3c

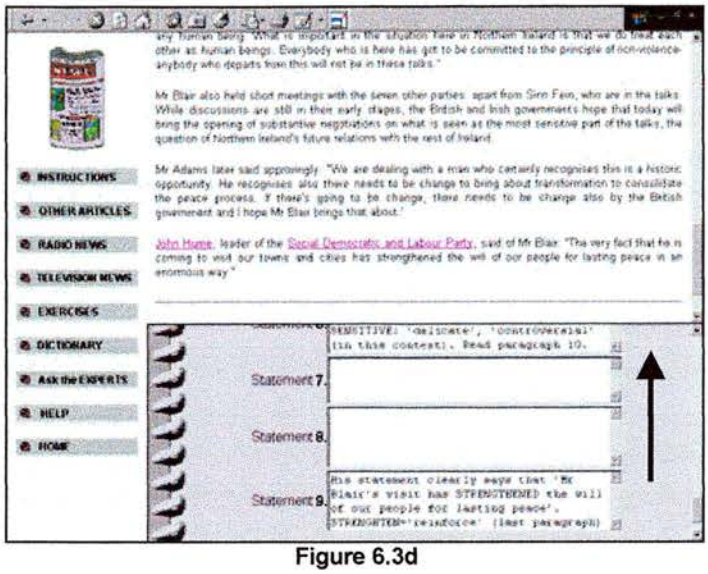

Figure 6.3d

The example of student A above is also typical in our study since most students, when they did not manage to detect where the source of the problem was after reading the explanation, turned to the tutor to try to find the final support for their understanding of the error.

Feedback is an area in which learners needed more personalised support, and as I was there observing and available for their questions, although I made it clear I could only intervene for technical matters, they tended to try to obtain some more feedback than the one provided by the explanation. Some students did not trust their own interpretations while self-assessing themselves and thus they sought that human-tutor support. A perfect example of this need is manifested in Student C's procedure as we can note in the On and Off description of session 2 newspaper in Appendix F. The tutor had to intervene actively to assist the student in understanding the feedback. His poor skills in translating the feedback, question and text made the task of understanding and identifying the source of error impossible. Student C's linguistic level was the lowest of the sample and thus the explanations and probably all the input provided in the session may have been i+3 or i+4 instead of the desired i+1, following Krashen's Input Hypothesis terminology. Thus, the student could not take in the information provided and consequently failed to self-assess. Furthermore, at one point in the session he even admitted himself that he needed somebody to help him not to misinterpret things:

> "**St C**: This shows that I (*laughs*) need somebody besides the programme (*laughs*) to understand things.
> **Tutor**: So, you need somebody.
> **St C**: Yes, to help me focus things better…this does not mean that the program is bad (*both laugh*)…"

It was also noticed that students who were convinced of an answer had more problems in understanding the explanation since they had a fixed idea and then had more difficulties to identify where the source of error was. Furthermore, the majority of instances where students had difficulties in understanding the explanations appeared to be due to their preconceived idea of the correctness of what they answered. A strongly held perception which is then challenged by somebody who informs us that this perception is wrong, requires self-programming to understand the new information. This is applicable to our situation with the computer feedback. The computer is informing us that our perception of the correctness of the question was wrong and provides us with a possible explanation, but we have difficulties to understand this because our minds are still fixed on the past belief. After reading and checking the text, the question and the explanation some students had doubts about the correctness of the answer, questioning the "authority" of the computer on this matter. Students could not target the source of error since they were not open to accepting that the problem of understanding could have come from another level, angle or direction. The pre-designed focus of the question was different from the one applied by the student. As a result, this mismatch could also increase the difficulty of understanding the explanation.

Student A, for instance, in session 1 described her difficulty in understanding the explanation of question 8 and 4 of the newspaper article. When she was asked about whether the explanations were useful she reported the following:

> "**St A**: [...] well...you read and you think it says one thing but it really says another. Then, of course, the explanation, for example, of question 8, yes its true that this man says that people 'shouldn't be there' in hospitals, but...of course, from that concept to that of saying that they are unnecessarily admitted there is a difference. (*laughs*) It shocked me that he was saying that, but I thought, well...it is what it says. In question 4 I read half of the question and I didn't really pay attention to how the statement ended."

This example supports the concept that learners who have a more fixed preconceived idea had more difficulties in understanding the explanation. Regarding question 4 the student realised that the source of error was not linguistic but due to reading too fast. The explanation, therefore, prompted the learner to find a reason why at that moment of answering she was wrong.

In the feedback phase of the newspaper articles another common procedure occurred. Student C's On and Off actions in Appendix F exemplify this feedback procedure where students in

the search for understanding the source of error, besides contrasting explanation and question as illustrated in Figures 6.3d above, also contrasted explanation with the text (Figure 6.4a) and question with the text (Figure 6.4b).

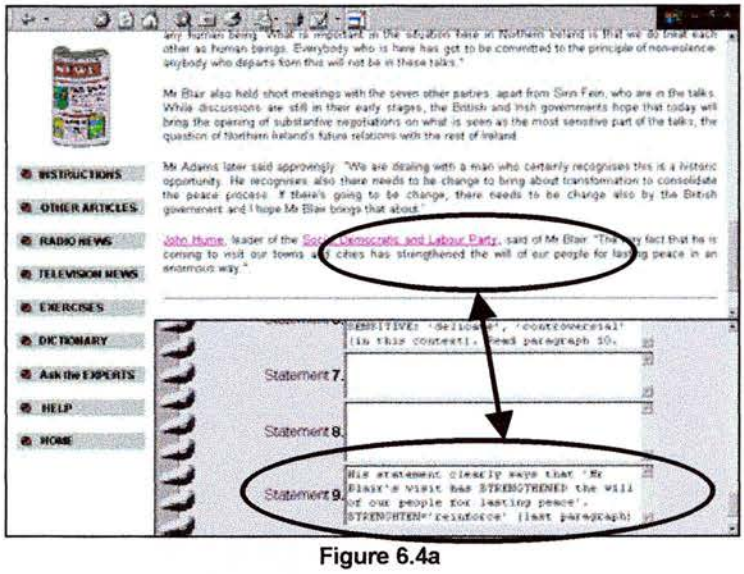

Figure 6.4a

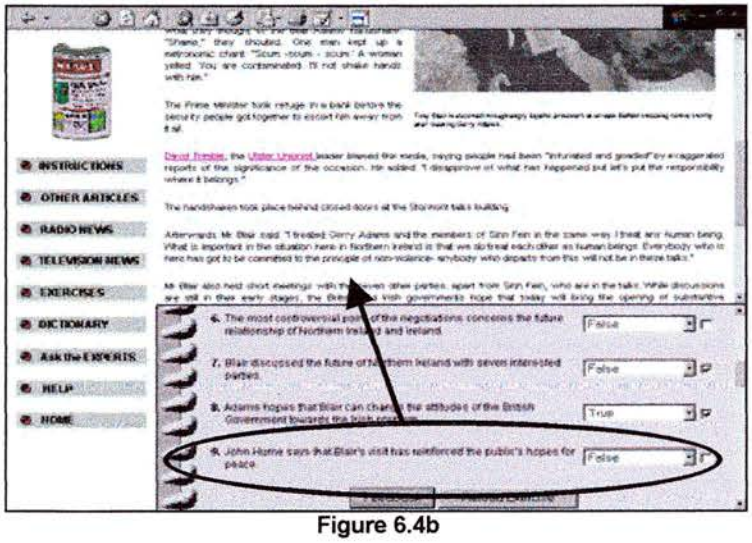

Figure 6.4b

This procedure, however, was less frequently observed when students were working on the radio or TV news items since relatively few students consulted the transcript for this contrastive process (4 students in session 1, 8 in session 2 ,and 6 in session 3 and 4; refer to Tables TSR in Appendix C). Other students simply replayed a piece of the extract or the

whole news item with or without subtitles to try to catch the information that they had not managed to identify when doing the exercise, and others just simply read the explanations.

The delayed two-step feedback allows learners to consider different approaches from the ones so far described. Learners may decide to try to find the source of errors by themselves before the program provides that information. In this respect we observed two different approaches in our study:

The first is how student E performed in session 3 television where after having read the results and identified the incorrect answers proceeded to listen to the whole TV news item while reading the transcript. He then continued to read the explanations of the two incorrect answers and commented that he had managed to find out the explanation of one of the two by himself. In the retrospective interview he explained the reasons for his transcript use.

> "**Tutor**: When and why?
> **St E**: before the computer gives me the explanations of the wrong answers...to try to find them by myself. Knowing the ones I did wrong, I went to check with the text if I could find the reason. And then what did I do? I listened following the transcript and realised the mistake of the first question. The other one I didn't manage. I had to read the explanation to see where the error was...basically I didn't get the question."

In this example the student realises that the problem lay in understanding the question and not the text. Probably he did not manage to come up with an explanation for that very reason. His focus was on the understanding of the text and took for granted the understanding of the question. The fact of having True-False type questions emphasises reading for detail since learners must accurately understand both the text and the question, to answer correctly. The issue here is that in some cases we realised in our observation that students were basing their errors mainly on the text and then had more difficulties in finding the error since its source lay in the question.

The second approach is similar to the first one but is characterised by a more detailed exploratory nature. Student L in session 3 television decided to find out the reasons for his incorrect answers in the following way:

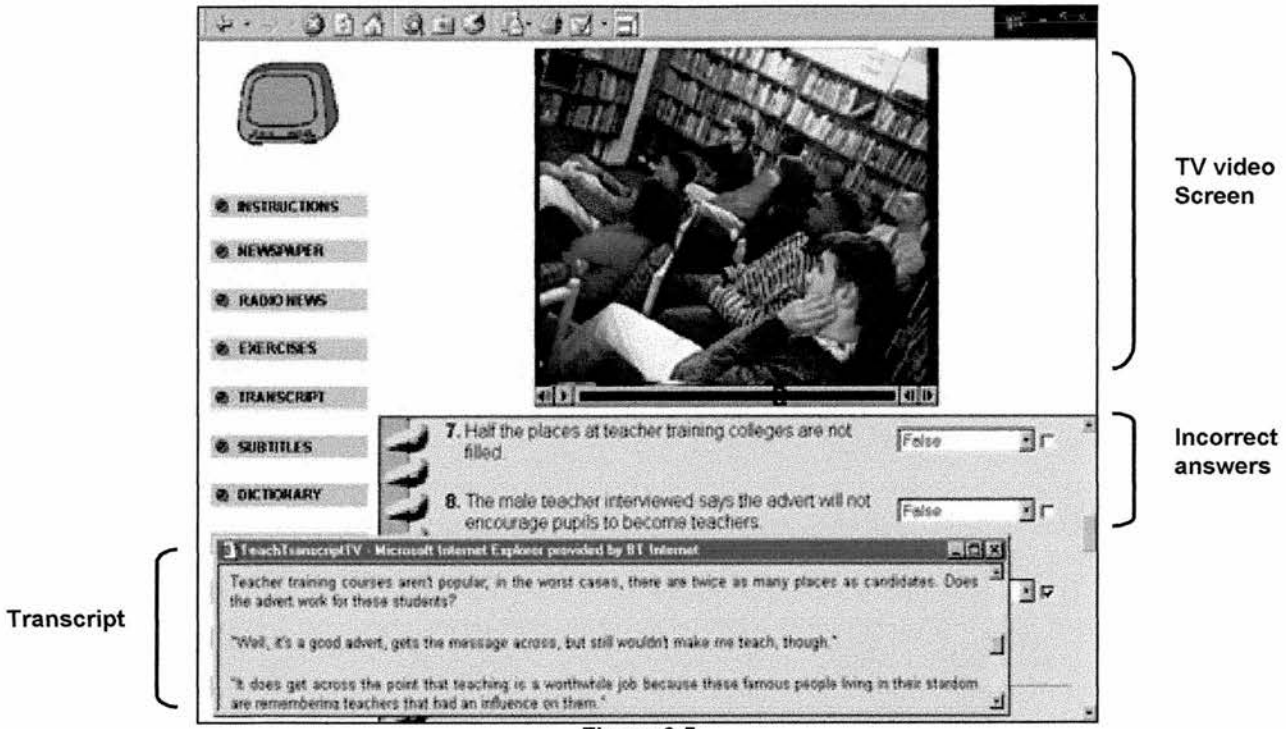

Figure 6.5

After having seen which were the incorrect answers he then proceeded to watch the TV news item with the transcript and at the same time having the question with those incorrect answers visible on the screen (see Figure 6.5). Therefore, student L watched the TV news item following the transcript until the point which the question referred to, paused the video and analysed where the error for his answer was, alternating transcript and question. Student L also checked the ones he had answered correctly.

Student L in the retrospective interview of session 3 commented:

> "**St L**: [...] and the transcript to help me understand. I mean, I watched the TV...and to verify the question...the transcript helped me in that respect [...] it helped me to try to see where the error was. I wanted to find out by myself before I got the explanation"

As demonstrated, student L worked conscientiously on hypothesis-testing about where the error may have happened. Student K tried to do something similar but she did not manage since technically she did not resolve the different options, as student L did, to manage to see all the three features: screen, transcript and questions, and thus she became lost as described in section 6.4. 3 above in the discussion of students' self-imposed cognitive overload. One reason for her failure was that she did not reshape the transcript window and wanted to do

everything at the same time while listening. Student L paused at different points to allow himself thinking time to consider possible sources of error.

We should point out that if we examine Tables TSR these were the only instances in the four sessions regarding the radio and television items where students used the transcript or subtitles before the explanations. These students and others such as student B, also followed similar procedures with the newspaper articles where there are fewer technical mechanisms to be handled. We should also point out that students such as E and L had fewer difficulties in understanding the explanations of the wrong answers. Firstly, because they had obviously managed to identify the source of error or, secondly, because perhaps having previously analysed possibilities in trying to find the source of error from different angles or directions, they were already predisposed to consider an alternative solution. Thus, student L in session 2 reported:

> "**Tutor**: Did the explanations help you?
> **St L**: Yes…but before the explanations I tried to find out where I was wrong
> **Tutor**: Did you manage?
> **St L**: Yes, I found them all.
> **Tutor**: then. Did the explanations coincide with what you thought?
> **St L**: Yes…they helped me to understand it better, but you already realise that you made the error when checking the text and the question."

Some students who consulted the transcript in the feedback section of the session checked in the text what was described in the explanation. Student V, in session 1, described how she was prompted to use the transcript by the program, although she did not exactly follow what the explanations suggested:

> "**Tutor**: Why did you use the transcript?
> **St V**: Well, ... because in the explanations it says so…this thing here (*pointing at the screen*)
> **Tutor**: But here it says…Listen to the first section again.
> **St V**: I know…but I went to the transcript to see where it was."

She selected an easy and practical route to find out the source of error. The suggestion provided was that she could listen to it again in order to try to see if this time knowing the source of error she could manage to decode it. Few students followed that option when the explanations suggested this; student F in session 2 for question 9, and 4, and student H in session 3 are two examples. Most learners that performed a sort of post-feedback did it by listening or watching the whole extract. However, with the newspaper article most students went to see specific points in the text as prompted by the explanation. The fact that it was technically easier to do that with the reading text prompted students to do so.

The last and possibly the most unexpected way of using the delayed two-step feedback of the program is the strategy used by student O in session 4 (Table TSR4d in Appendix C). After having done the general comprehension question he chose Option A, i. e. to watch the whole item again before reading the questions. Once he had finished watching it in detail, as he rewound and paused several times, he clicked the questions icon and accessed them. After that he read and answered all of them one by one (process 5C in Table TSR4d), choosing the option *Don't Know* for two of the questions. When he finished that, he scrolled the page down to the *Evaluation* area without having the questions but leaving the *Feedback* and *Reload Exercise* buttons visible on screen, as illustrated in Figure 6.6 below.

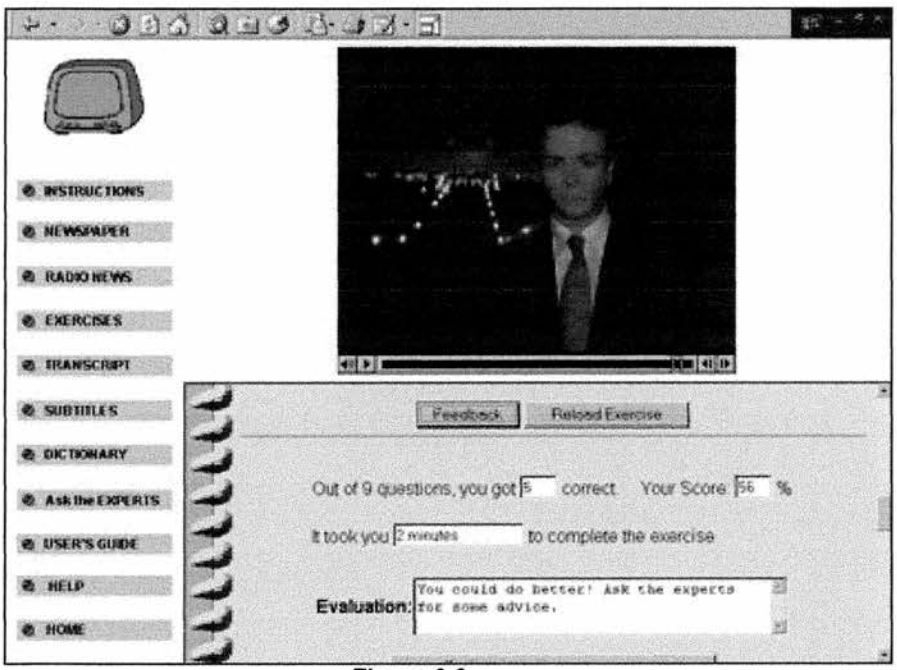

Figure 6.6

Then he clicked the *Feedback* button and analysed the results. He obtained a score of 5 out of 9 and so he calculated the ones he answered incorrectly: 5 correct + 2 *Don't Knows* = 2 wrong answers. Therefore, he read the result but did not check which ones were correct and which ones were incorrect (process 8F). He then proceeded to click the *Reload* button and do the exercise again but this time he answered all the questions. Thereafter he watched the TV news item again while checking his answers by scrolling the questions page down. During this process he changed a couple of the answers previously selected. Finally he clicked the feedback button again but this time he checked the answers and the explanations, doing conscious feedback work with the subtitles and the transcript, to try to understand the text in detail.

Student O challenged himself to be better and to try to improve his score. He was self-assessing his performance in the delayed first-step feedback introducing another step into the equation. This was a way of motivating himself to improve his performance while activating his hypothesis-testing abilities. Student O introduced a procedure, a delayed three-step feedback, which was certainly not considered in the design of the program but which suited his learning style. This instance also reflects the affective element that the score usually produces. Curiously, student O obtained the same score, 5 correct, as when he had first answered the questions but this time he had answered them all. Therefore, improvement was not reflected in following this procedure in this case, but this drove him to go through the questions again in more detail. Furthermore, he was trying to test himself to find out how many correct answers he could manage to obtain without having to watch the news item again. Student O followed the same procedure for the newspaper article in the same session.

The *Reloading* facility of the exercise in the program was available for those students who were basically dissatisfied with their results to provide them with another opportunity and to minimise frustration. Moreover, in the *Evaluation* message of the 33% score (or below) a suggestion to redo the exercise is provided: "Why don't you go through the exercise again? Reload the exercise!". There were three instances when working on the newspaper articles where student K in session 1 and students J and R in session 3 used the *Reload* button, not as a conscious strategy like the example of student O above, but because they were dissatisfied with their results.

Student K, for instance, answered 3 questions correctly the first time and after reloading her score went down to 2 out of 9. Student K recognised that she had done the exercise too quickly at first. Probably because it was session 1 she was testing the difficulty of the questions and how well she could do with the little amount of time spent on it. She was a little frustrated afterwards since when she worked in more detail she obtained worse results. Student J, on the other hand, increased his score slightly (from 3 correct answers to 4). In the case of student R the reason for her low score (33%) was due to her task approach, which was completely different from the one the detailed comprehension questions tried to encourage. She admitted not being interested in the details of the news item and that she approached it from a global perspective. Thus when she saw her score, she realised that the type of work required to answer these questions had to be more focalised. Student R increased her correct answers to 7 and then she checked the explanations of the 2 incorrect questions.

Another aspect observed in the data is the fact that some students, such as F, K, O among others, made a conscious decision to reread the questions with correct answers although they did not have any extra information since no explanation is provided for the questions that students answered correctly. This takes us to consider that some students were very aware of the luck factor involved in the *True-False* type questions. Thus with questions that students were unsure of or had doubts about and were answered correctly, the students' doubts remained unresolved. That is why student F in session 4 commented that she would have also liked to have the explanations of the correct ones. She explained the reason for her suggestion:

> "**St F**: Because sometimes you answer it by cha...sometimes you answer True or False according to your criteria but you don't know either if it is for that ...You are not sure...I know about some but there are others that you say, well...I have answered this because of that...but you don't know if that reason is correct."

Student Q, on the other hand, in session 2 newspaper did not check the explanations but only the ticks to find out which questions were incorrect. Yet, in statement 31 of the SILL questionnaire (I notice my English mistakes and use that information to help me do better), he answered: Usually true of me. The explanation for that inconsistency can be explained due to an element of tiredness. Student Q came to the session after work, taking into account that he was working a night shift that week. When he was asked why he did not consult the explanations, he replied:

> "**St Q**: Because I think that I had it clear...the same idea that I had...that still was wrong.
> **Tutor**: Don't you think that this idea could be different from what it actually is?
> **St Q**: Yes, possibly...of course, one should look at them."

In the retrospective interview when discussing the incorrect questions he realised that he should have checked the explanations in order to identify the source of error. Tiredness may have played a role in not bothering about working on the feedback of the exercise.

As we also mentioned in the Dictionary and Cultural note sections (6.2 and 6.3 respectively) above, there are instances when students skim read quickly without much attention or did not even read the feedback. For instance, revising the screen video recording of student C in session 2 radio we realised that he did not read the explanation of question 9 since he did not scroll the page down completely to the bottom. He worked in detail through all the explanations of questions 3, 4, 5,and 6, and when he finished with explanation 6 as the explanation 9 was not visible on the screen, he thought that he had checked them all, but he had not. Other students admitted not reading completely or paying little attention to the

information provided. For instance, student O in session 2 says: "the explanations help you with words, for example, *take over*, which I looked up in the dictionary and I realised I had it in here (*laughs*) but didn't read it. Also I find the explanations...they give you the actual explanation of why this is as it is and why not, there's always a suggestion that says, consult this, listen again or check the transcript."

Students in general terms valued the fact that the program provided explanations, as student S in session 3 said: "If I had only the information about whether it was true or false and I hadn't had the explanations, most surely I would have thought that the computer was wrong." In the evaluation questionnaire at the end of the session 7 students reported that the explanations helped them a lot and 12 students thought they were quite helpful.

Regarding the degree of help the explanations provided, students generally reported that they supplied the particular details that the students missed which was the cause of the error. At the level of vocabulary, for instance, student V in session 4 commented as follows:

> "**St V**: They help you to find out why you made a mistake, why you get confused or why you skipped, well, whatever. They help you, for instance, here the word 'sensitive'. Well, I didn't know this word but as I found it familiar I skipped it without giving it much thought...so I thought I knew it but in fact I didn't"

Explanations also encouraged them to read things again and reflect on what happened when they were doing the question. As student U in session 4 maintained:

> "**St U**: The explanations...well, they forced me to read it again and then understand it better. [...] typical, you see, you pick up the first word, for instance civilities, you see that it coincides and you think, great! Collins, civilities, well then that's it and you fall into the trap, perhaps it is the problem of going too fast."

Explanations also helped students be aware of their wrong inferences as student S in session 2 explained:

> "**St S**: Yes, a lot. They help you to get to the detail of things [...] For example, we (*meaning us the students*) don't know whether...he says something and then I already presuppose another which in fact he doesn't say. In a sense they help you stop presupposing, or inferring or going further...and this is perfect. Because I usually go further and make up things and in that sense they are great... because besides knowing that you infer something wrongly, they tell you that you did X due to Y."

Some students appreciated the fact that the key words were in capital letters so they could be identified very quickly. Thus, they appraised positively the fact that the explanations were clear and made it easy to identify the source of error. Student L, for instance, in session 3 explained:

> "**Tutor**: Did the explanations help you?
> **St L**: They are clear as well...for instance here the important thing is the ...*update.*
> **Tutor**: Did you catch that they were saying modernise?
> **St L**: Yes ...but I missed the point...I concentrated on *very soon* and the important thing was *modernise.*
> **Tutor**: Did you find it clear?
> **St L**: Yes,...it's great because it gives you quickly...you quickly identify what you have done wrongly. This word, *cope with* was also a key one to understand it."

Explanations also prompted students to think about and be aware of what went wrong when doing the exercise. Student K in session 1 said:

> "**Tutor**: Did they help?
> **St K**: A lot...[...] they matched with my errors and also I realised that it wasn't a problem of not understanding the text but of having not paid enough attention to the question."

Explanations did not cover all the eventualities, as student L pointed out: "Yes, they helped me except in question 8...I was all the time wondering what that verb (*prompt*) meant [...] I would have liked to have the definition in the explanations."

To conclude this sub-section, we should point out that explanations regarding comprehension skills are very difficult to design since the source of error can be due to an element which was not considered. It is impossible to cover all the multiple possibilities since the error can come from several levels and directions: not understanding the question, or not understanding vocabulary in the text which the question was not intended to target, or not catching a word in the listening, or images that may mislead students from what is actually said in the audio, or confusion of words due to similar pronunciation, etc. However, the feedback system and the clear content of the explanations followed in **ImPRESSions** worked with reasonable effectiveness since in most cases students reported that the explanations were clarifying the missed points and were exactly directing them where they had a knowledge limitation. In developing comprehension skills, either reading or listening, the two-step delayed feedback is perceived as ideal since it allows learners to develop hypothesis-testing and at the same time promotes strategies for self-assessment.

6.6 THE USE OF EXPERTS MODULE

From the designer's perspective the Experts module had a disappointingly low frequency of use. Hence, our discussion in this section is directed to address that issue of low frequency of consultation. Two essential factors were the time limit and the constraints of the experiment where students were to perform tasks on two texts in each session. There were, however, other factors for the low consultation, which are discussed in the next sub-section.

6.6.1 WHAT and WHEN

Table EXP in Appendix C summarises the students' consultation of the Experts module. There were 17 students who at some point in the four sessions consulted the Experts, thus 5 students (F, K, M, N, T) never accessed that help. Some of the reasons for not consulting were due to time constraints or that they did not feel the need or see the point in referring to them. Taking into account the SILL questionnaire these five students answered statement 33: *I try to find out how to be a better learner of English* as follows

- F: Sometimes true of me
- K, M, N: Usually true of me
- T: Always or almost always true of me

Therefore, student F behaved similarly to how she reported since she did not usually tend to access this kind of information. Student T, on the contrary, liked it and reported to be almost always seeking for that metacognitive knowledge for being a better learner. Thus it seems strange that she did not consult the Experts. Nevertheless, she reported that she did not have time in the four sessions. She thought that to consult the Expert would have required a lot of time in order to do it properly.

Several students reported the time factor, and some replied that if they had had the program at home, they may have consulted this module more times. The fact that sessions lasted from one hour and a half to an hour and forty-five minutes was too short a time for some students, as they devoted much of this time to working conscientiously on the comprehension tasks.

The time factor and the constraints imposed by the experimental study may have had a direct influence on the frequency of Experts' consultation. We have to take into account that around

twenty minutes of the whole session were devoted to the retrospective interview after each text.

Student K did not find any reason to use them. She could not see any advantage. In the same respect, student M, after the demonstration at the beginning of session 1, formed her opinion about this module and felt that the questions were not motivating enough and probably too general. She added, however, that perhaps one day she would devote a session to checking all the questions.

The remaining student who did not consult the Experts, student N, in session 4 had completely different reasons:

> "**St N**: [...] I don't think it could be useful in my case because I wouldn't follow what they say. I am "Expert" enough (*laughs*)...well, I don't know, the truth is that I know that I wouldn't follow their advice, because I am that kind of person that likes doing things her own way."

Her humorous comment underlines the issue of self-perception in which one does not need advice because what s/he follows or does is the right thing to do, as student J also commented in session 2:

> "**St J**: [...] the thing is that I didn't consult them because they give advice and I don't need any advice (*laughs*) I thought now they are going to tell me how I have to read, well, that is what I imagined they say, isn't it? How I have to read, how I have to do it...but I think that I am reading it as I believe it's the right way, at least it works for me, then I didn't consult them."

Student J, however, consulted one question in the following session out of curiosity and reported that he was already putting into practice the strategies the Experts provided, thus they did not add much to his already strategic knowledge.

Student R in session 1 thought the same and did not consult them more. Student U in session 2 thought that the answer to the question she consulted did not add anything that she did not already know or do. The fact that these four students did not feel the need to use that module is related to their strategic competence. These students throughout the sessions showed a variety and richness of strategies, which matched with what they reported. These four learners already had high strategic knowledge. According to the SILL results (Table SILL1 in Appendix C), these four students, except J's 3.06, were above the mean of 3.13 (see Table 6.4). Furthermore, they were advanced or upper-intermediate students according to their

linguistic level. Therefore, for those four learners the Experts module was an add-on feature which could provide little guidance. The problem, however, arises from the application of those strategies to make them as effective as possible. As student P commented: "one thing is to know about these, and the other is...(*to apply them*)[1]" and we could also add applying them effectively, i.e. to have a positive effect on the students' language learning.

However, in the case of student C, he also thought on the same lines but from our observation and what the data seem to reveal this is the type of learner who could benefit from that advice. Yet he had fixed ideas about his approach to the language task. When asked why he did not consult them in session 1 Student C replied:

> "**St C**: Well, ...I have the idea that perhaps they are not very useful (*laughs*) I mean,...well, I think I have put it wrongly... It is not that they are not useful but they may tell you...strategies on how...on how...you know, to read again and such. But as I have my own learning strategies, well...with these ones I try to make them work. I suppose that the Experts say something like that...The other reason, anyhow, was that I didn't have time."

Student C is the only student who did consult some questions but didn't finish listening to the answer. His reason for that was that as he agreed with what they were saying at the beginning and thought that they would repeat the same or similar general concept at the end, he did not need to play it all. Probably student C knew about the strategies but had difficulties applying them, as student P above was trying to put forward. According to the SILL he had a higher score of 3.7 quite above the mean of 3.13. But again, the SILL questionnaire only reflects the perceived language learning strategies. The problem here was that student C was used to using strategies, knew about them but he was not that effective in applying them as he in most cases could not resolve the issues.

On the contrary, student O commented after he consulted question 7 in session 1 radio:

> "**St O**: [...] I found that what they told me was quite useful. They point in the right direction on how to listen to a news item and what is best to comprehend. I have already used some of the suggestions."

He recognised that there were strategies he was already using but also found out about new ones.

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[1] Student P left the sentence unfinished implying what is suggested in the brackets.

Four students, such as D, consulted the Experts in the first session and then they did not feel the need to consult them again. From the Table EXP in Appendix C we observe that students in the sample consulted the Experts module a maximum of 3 times (in only one case, student O), 2 times were consulted by 10 students and once by 7 students. Most students preferred to consult them at the beginning of the session (Table 6.34):

When		Number of times
Beginning of session		10
Middle	After 1st Text	4
	Before 2nd Text	4
While doing feedback		2
When reading questions		1
End of Session		4

Table 6.34

Some of the students who consulted at the beginning of the session may have made a conscious decision before coming to the session. This may have been prompted by the retrospective questions about the Experts module of the previous session. Students who consulted them at the end of the session did so because they finished the tasks before time elapsed and therefore decided to try some questions.

Student E admitted that the information was useful but only took in the first idea that the Expert mentioned, he just "listened" to the rest. He meant in a relaxing way without paying much attention to what they were talking about. It could be suggested that as this was not part of the exercise and not testable students usually took a more relaxed, less conscientious attitude to assimilate strategic information. Besides, learners' attention span may be shorter when listening/viewing a text of this type than when reading it.

Student U and D were prompted by the Feedback evaluation message of the Radio section in session 1 and followed the advice to consult them. Student D later commented:

> "**Tutor**: Was the information useful?
> **St D**: Yes, ...especially, that thing of the intonation...to pay attention to stressed words."

Student H consulted the Experts to find out about the concept of skimming prompted by the Instructions of the newspaper article. It is interesting to note that in every session the same concept appeared in the instructions and it was not until session 4 when student H thought

about it. He admitted knowing the word *scanning* but was not sure about *skimming*. He even jotted down some of the strategies suggested by the Experts for improving this: "I took notes about this thing of the key words and the chunks."

Students E and I perceived the Experts module as a separate component, as extra information. Student I reaffirmed that opinion in the four sessions, suggesting that he would consult them separately. For instance, he would devote one session exclusively to working with the experts. He did not perceive the relation since he thought they had nothing to do with the news items. At the end of session 4 as he had time left, he consulted them. He thought it was a good idea to incorporate them but continued seeing it as a separate component.

Student S in session 1 thought that to consult them would have been more complicated since their suggestions on strategies would have created more problems, and therefore decided against it.

6.6.2 WHAT and HOW MANY: QUESTIONS

The question most often consulted for the listening strategies was question 7 (refer to Appendix B to see the actual questions and Experts' comments):

Reading strategies	No of times
QUESTION **3**	7
QUESTION 4	6
QUESTION 8	3
QUESTION 2	3
QUESTION 5	2
QUESTION 1	1
QUESTION 6	0

Table 6.35a

Listening strategies	No of times
QUESTION **4**	7
QUESTION 7	6
QUESTION 5	4
QUESTION 8	4
QUESTION 3	3
QUESTION 6	3
QUESTION 2	1

Table 6.35b

Regarding the reading strategies questions it seems logical that questions 3 and 4 had the highest consultation since the instructions of the newspaper article directed the students to refer to the Experts in case they did not know the meaning of skimming.

The highest consultation in the listening strategies questions was question 4 (Table 6.35b), which refers to what can be done when students cannot follow the speed of the speaker. This

issue was one of the major concerns for some students in the sample and appeared in the retrospective questions various times:

> "**Tutor**: Did you have any problems with the speed?
> **St M**: Yes, the pieces that I didn't understand...it goes too fast (*laughs*)..
> **Tutor**: Do you think it's a question of speed or vocabulary?
> **St M**:...because you don't understand something but for a second you remain thinking that possibly you know the word, but you don't manage to remember or assimilate that word and then has advanced very fast. Has he said that or hasn't he?
> **Tutor**: so this is due to speed.
> **St M**: Yes...because they speak too fast on the radio because they are broadcasting the news...
> **Tutor**: So then did you do anything to solve this?
> **St M**: Could I have done anything? Could it go more slowly?
> **Tutor**: Not in this program but anyhow, when this happened to you, did you do anything?
> **St M**: No...I thought that as I was going to listen to it again...'I'll pay more attention'
> **Tutor**: So you didn't do anything at that moment
> **St M**: No, that's the reason why I stopped at some points the second time...but I preferred doing it in the other way (*listening the whole extract without stopping*) at the end."

Student M tried to compensate and solve the problem of speed by pausing at various point so it allowed her thinking time to try to decode what was said. She chose that strategy although she thought that it was cheating a little bit since in reality you cannot do that. She never consulted the Experts who could have provided her with some tips to overcome that problem.

It is interesting to note that the second highest consultation for the listening strategies section is a general question (*How can I improve listening to the radio news?*). Students may have thought that consulting one or two general questions could provide them with more tips than choosing a question dealing with a particular issue. Students who consulted questions about more particular issues did so because they had that very problem in the task or in a previous session. In that sense student B, for instance, consulted the Experts at the beginning of reading the comprehension questions of the listening task. The Experts' question was "What can I do when I comprehend 50%?", which was exactly the problem that he was having at that particular point.

6.6.3 STUDENTS' OPINIONS

The results of the Evaluation questionnaire at the end of the sessions illustrate the general trend of the students of the sample. They thought the Experts module was:

Evaluation	Students
Interesting	B / C / D / E / I / P / Q / S / U / V
Useful	I / L / O / T
Not Useful	A / J / R
Unnecessary	N
Don't know	F
(No comment)	K

Table 6.36

The Experts module was interesting for the majority of the students. For some it was useful as they managed to obtain some information they were not aware of, and for some more strategically knowledgeable students was not useful or even unnecessary due to the reasons mentioned in section 6.6.1 above. Some students included the following comments (Table 6.37) and the reasons for their consultation or lack of it:

Student	Comment
A	No...because I like working on my own and face difficulties on my own, too.
B	It can help you to study.
C	To check doubts if you don't have a strategy to follow the program.
E	It can help to learn some learning strategies.
J	In my case it hasn't added anything new that I didn't know. Besides, the information they provide is always the same so you only need to check them once.
L	They are useful before you start an activity since they give you suggestions.
N	They don't give you any help to understand the text, only to improve your reading skill in general.
O	They tell you how to make the most of your work.
P	Interesting in general terms but they don't help you to resolve particular doubts.
R	They give you pointers that at this stage you already know.
S	They justify strategies that are not so obvious. Moreover, you see them talking.
T	Although I haven't used them due to lack of time, I think they could be helpful to improve learning strategies.
U	Sometimes they provide strategies that we don't know and they are useful. In other cases they don't provide anything new because they are strategies that you do instinctively, even if you are not conscious of using a particular strategy.
V	They help you refresh your memory.

Table 6.37

6.7 STUDENTS' EVALUATION OF THE HELP FACILITIES

Students in the last questionnaire *Projecte ImPRESSions* (see Appendix D, p. lxxix) had the chance to express their opinions about the program and their experience using it. 3 students (G, H, M) never returned the questionnaire and therefore the data of only 19 students of the 22 are described here.

As far as the help facilities are concerned (except for the Experts described in 6.6.3 above), students evaluated the helpfulness of each one as follows:

HELP FACILITY	A LOT	QUITE	A LITTLE	NO
DICTIONARY	3	15		
CULTURAL NOTES	2	12	2	
TRANSCRIPT	3	8	3	
SUBTITLES		9	1	1
FEEDBACK: EXPLANATIONS	10	8		
(CONSULTING DIFFERENT MEDIA)	5	10	1	

Table 6.38

Students found the majority of help facilities quite helpful and valued greatly the Explanations of the wrong answers. There were some students who also commented on the clarity of the explanations. Students who had previously used some CALL software valued the fact that the feedback was not only the Right-Wrong type.

In general terms, students were pleased to have had the chance to use the program and some even asked where they could buy it. The following Table (6.39) summarises students' comments on what they preferred about the program and what they liked less. We have emphasised in bold type the issues that relate directly to the use of help facilities. If some of the summarised comments are reported by more than one student, then the number of students is indicated in brackets.

Summary of the features of the program they **preferred**:
• To listen and read real English. • The fact that it is a program that allows you to watch real news using 3 different media. It's a very entertaining program.(2) • The Radio and the Television. • The Video. • The quantity of aspects of the language that is involved. • **The fact that I could always look up for a word in the dictionary, stop the video, reread the text**. You could work at your own pace. • You can work on your own. • **The variety of dictionaries.** • The level of difficulty of the questions which forces you to understand the piece of news completely. • It's a good way to learn listening and reading which also allows you to improve vocabulary. • **The resources: you have all the possibilities to work on the text.** (3) • **The evaluation system which allows you to know what your performance has been like**. (4) • **The clarity of the explanations in the feedback.** (3) • The high degree of interactivity.
Summary of the features of the program they **liked less**:
• That all the texts were news. • **To synchronise the subtitles with the voice.** • **Not to find compound words in the dictionary.** • Some questions were confusing. (3) • **That the explanations of the wrong answers were in a different section within the feedback area**. • **The Experts.** (3) • **The possibility of overusing the dictionary, which should be penalised.** • **You can't work with the dictionary and the transcript at the same time in the TV section**. • **Not to find the meaning of the word in the dictionary.** (2) • The texts have a very small font. • The paragraphs are not numbered. • The newspaper articles are too long.

Table 6.39

Some students were impressed by the program as they had never worked with one and thought it was very easy to use and very practical. Some who had used CALL software

before rated **ImPRESSions** highly since most programs did not have as many resources as were available here.

As we can observe in the above Table, students were also critical of some of the features of the program which need to be improved such as the synchronisation of the subtitles and the possibility to work with the transcript of the TV section and the dictionary at the same time. There are issues in the less preferred aspects of Table 6.39, which are related to the students' lack of dictionary skills, such as compound words or not finding one word. Being Internet dictionaries, the solving of these problems is beyond our limitations. However, this raises the issue that learners working on a computer want this to perform lots of tasks to make students' work really easy and thus expect online dictionaries to find everything without some filtering. Therefore, our response to that would be that CALL programs and resources should assist and guide the learner but to a sensible point whereby the student should be the most relevant **active** part of the interaction.

Chapter 7
CONCLUSION and IMPLICATIONS

This study has created an overview on how the students in our sample used **ImPRESSions** and its resources including the help facilities provided. We have also illustrated the range of factors that influenced the design of the program, the design of the research study and also the results. As we have shown, individual differences among learners, individual circumstances, variations of task approach, variations of media, and in short, variations among texts, contexts and tasks, following Chapelle's classification (1994), all contribute to different interactions between the learner and the program.

Our perspective has been global, trying to relate the use of the particular help facilities to the texts and tasks as a whole. We have applied descriptive analysis of students' use of these help facilities. This has allowed us to describe the learning strategies students were using in the process of completing their tasks and, at the same time, provide details of the different interactions between the students and the program. Describing and analysing these interactions have given us insights that have clear implications for future CALL design, especially those related to reading and listening comprehension and for further research on aspects of CALL and of SLA tasks.

The impact of **ImPRESSions** had a clear influence on the students' way of working as we have tried to demonstrate in various sub-sections of Chapter 6. The way, for instance, in which **ImPRESSions** made some students change their normal consultation habits has been exemplified in the Use of the Dictionary section 6.2.

7.1 GENERAL SUMMARY OF THE FINDINGS

We have shown throughout Chapter 6 that different learners needed and applied different levels of control depending on multiple factors. Most of the time they applied this control in an informed manner since either they consulted the language training components of the program or they had a clear idea of the behaviour they followed. However, as we have pointed out in some cases the influential factors were difficult to isolate since they interact at the same time in multiple ways. This kind of research has provided, however, a broad picture

of the sort of variables in action and identified some which may have influenced students' behaviour in our study.

We can certainly affirm that **ImPRESSions** caters for individual differences since, as we have demonstrated, the program adapted to the high variability of our small sample. This has been shown in various sections, such as section 6.2.2 with the description of the use of different types of dictionary, but perhaps more revealing was the students' use of the transcript, subtitles and replay controls in section 6.4. The key issue is that the flexibility provided by the program permitted learners to suit their own needs taking into account both their learning styles and their particular learning strategies at the moment the study was undertaken. It also allowed them to experiment with new possibilities raising their awareness of strategic knowledge.

The cognitive demands put on learners by the program to respond to the tasks were generally at the level of the target students. Furthermore, students were able successfully to manage in this self-access context since **ImPRESSions** provided advice and informed options to direct their own learning in performing the tasks.

We have identified two major patterns of behaviour: a global approach to tasks and thus a less frequent use of help where the students relied more on their knowledge and strategies, including avoiding strategies, and the approach followed by the *compulsive consultors* which repeatedly consulted or made use of the help facilities to gain details of the texts. We found a minor correlation between the amount of dictionary look-ups and Cultural notes consultation, and thus we claimed that name for those types of learners. Coincidently, we identified that the second approach coincided with the use of the rewind/pause controls and thus the *compulsive consultors* were also *compulsive rewinders*. Apart from these instances, this study can not claim any correlation of the use of help facilities and linguistic level and perceived language learning strategy use due to multiple factors: small sample, high variability in the sample, misinterpretation of some components of the SILL questionnaire, etc. Therefore, we could safely claim that, for instance, linguistic level is one of many factors influencing the frequency and the way students consult help resources but probably it is not the most influential in some cases. This, of course, is a matter for further investigation.

7.2 FURTHER RESEARCH

The applications and implications of the use of **ImPRESSions** for SLA research in general and for further CALL research in particular are outlined in this section. But firstly, we would like to point out that the research studies suggested below take a more focused perspective and thus a less holistic approach than in the present study which has allowed us to identify relevant specific issues. However, this does not mean that descriptive research studies as the one presented here should not be undertaken. There is still ample room for holistic descriptive studies in CALL which could provide us with a better picture of the use of help facilities and the learners' use of resourcing strategies.

Regarding the use of the dictionary, for instance, we have already identified some possible avenues of research in our analysis of the data. Here, we summarise some of these.

Further research into learners' use of Internet dictionaries is actually needed if we are going to continue using those resources in CALL environments. We have outlined some of the advantages and disadvantages of using them within section 6.2. This can certainly provide relevant information to Internet dictionary designers to find out what are the most common foreign language learners' needs in order to improve their design and research facilities without compromising the learning and practice of valuable language learning strategies.

As far as the look-ups of words and inferring strategies is concerned, future research should detail the type of target words under investigation in terms of relevancy to the task but also their inferability depending on the level of the target learner.

Our study has described that students used varied inferring strategies, however, it was also noticed that the rate of being unsuccessful in their guessing was quite high in comparison with their guessing success. Therefore, how much or little use of some of these compensation strategies affects the level of understanding the text could also be researched. In section 6.2.4 we already identified this focusing our attention on the skipping or omitting strategies reported by our students. This could be operationalised targeting a specific word which students, by using think-alouds, could report the strategies they are using and therefore, the researcher could correlate these compensation strategies with the effectiveness of students' guesses.

ImPRESSions also allows experimental and control group investigations. For instance, hypertext links of words to definitions can be incorporated into texts and thus we could assign one group with the hypertext links and another without as we provided to our students in the present study. In this way we could investigate if students are prompted to follow the links and at the same time, we could describe the differences of the reading process in the two contexts. We could also observe if every type of learner would be incited to overuse the word consultation in a hypertext environment or whether simply the *compulsive consultors* would be more prompted to do so as identified in this study. Finally we could relate the above to the level of short-term memory and investigate how many of the targeted words were retained by students in the two groups. At the same time we could draw some conclusions in terms of incidental or intentional learning as the features of the two environments, one marked and the other unmarked, also facilitate this type of research.

With regard to the decoding help facilities, detailed descriptive research in this study has provided us with a broad picture of how learners made use of these facilities and has helped us to identify some relationships within the task process which students chose to follow in order to perform the tasks. The use of "requests for modified input with a listening comprehension task" (Hsu 1994, cit. Chapelle 2000:216) needs further investigation. Detailed descriptions of these input modifications, either using the transcript, subtitles or replay controls, is just the first step. The computer now facilitates the task of observing and counting these instances and therefore, more research of the kind as described in this study are beginning to be more common in the new millennium. Research can focus then on the relation between these modified inputs and the acquisition of specific vocabulary or they can be correlated, for instance, to the level of understanding of the aural texts.

Feedback is certainly an area under-investigated, and even more so in the area of comprehension. Research can point to the direction of trying to identify the most suitable self-assessment procedures for different types of learners. The effects of different types of feedback in terms of delay could also be researched. Thus we could investigate the effects of free delayed two-step feedback as in the present study where learners can choose if they want to find their own answers, or the learners could be asked to identify their own mistakes before they can access the explanations of the wrong answers. In this way we could observe the effects this process of self-correction has in the understanding of the feedback provided. This could certainly improve our method of designing CALL feedback in software which is aimed at developing comprehension skills and could also be a way of improving our design of

ImPRESSions. In that way we are drawing learners' attention to that kind of self-assessment process, which in our study some of the learners passed over to choose the "easiest" way out. As we have observed in the present study this is not always the case since *easy* does not entail *effective* (refer to section 6.5.2). Some students had more problems in understanding the feedback not having gone through that error-discovery process. This and other improvements can be also drawn from the present research study which are outlined in the next section.

7.3 IMPLICATIONS FOR DESIGN IMPROVEMENTS OF THE HELP FACILITIES

The present study has also provided insights into how we could improve the design of **ImPRESSions** in relation to the help facilities. First of all, improvement should be directed at technical adjustments to the present design. Thus the synchronisation of the subtitles is a technical issue to be resolved immediately since we have observed that learners like using this facility while doing the tasks as it provides them with scaffolding in their listening without feeling that they are not really doing a listening activity as is the case with using the transcript. The other technical aspect mentioned by one of the students is the fact that they cannot use the transcript and the dictionary at the same time in the Television module. The restriction of access to the transcript while doing the questions means that the dictionary cannot be used at the same time. Solutions to these two problems will be investigated in order to identify a solution and so improve the design.

Secondly, improvements could be implemented as a consequence of some of the results of the study. Regarding the dictionary, a learner training element similar to the one incorporated for the transcript and the subtitles could be included in order to help those learners with less dictionary skills. Moreover, this training information could focus on specific Internet dictionary skills, e.g. searching for approximations, scrolling techniques, cut-and-paste, etc which would assist all learners.

As regards the Cultural Notes design we could perfect the layout and division of the information by the graphic element as described in point 6.3.4. The graphics could divide the most relevant information in relation to the text from the least relevant to try to minimise on learners not reading that information.

Another aspect that could be included is to inform learners at some points in the program when they are going to use some elements in an "unintended" way. This message is not intended to prohibit learners from continuing with the action but to make them aware of the implications. Thus, to draw learners' attention to the fact that they are using the transcript in an "unintended" way when, for instance, the transcript is accessed when they are doing questions, we could also incorporate a message such as:

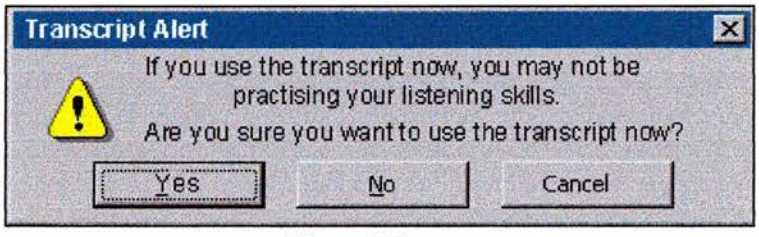

Figure 7.1

In this way, we can avoid the problem encountered with some students in our study who did a reading activity instead of a listening since they consulted the transcript to answer the questions of the detailed comprehension exercise.

Similarly, we could incorporate a language learning strategy message as a complement to the Experts module when the learner accesses an item of news from one of the media: newspaper, radio or television. We could provide them in a random way such as the sort of messages that some software offer at the start usually entitled TIP OF THE DAY. The learner could directly ignore it or could read it and if a button is provided they could even access the Experts module directly for further reference. The TIPS are obviously directly related to the media accessed. Hence, if students access a newspaper article, the strategy would be about reading comprehension and if the radio is accessed, the tip would be related to listening, and the same could be said for the television module, although some extra tips on paralinguistic information and the importance of the visuals should be also incorporated in the latter.

7.4 CONTRIBUTIONS TO CALL RESEARCH AND DESIGN

The present study has contributed in a number of ways to CALL design and research and in particular, suggests three main aspects which are discussed below.

The framework of the help facilities outlined in Chapter 4 helped to conceptualise the design of these facilities in the program and enabled us to explore how different learners use the help facilities presented. This framework provides a strong foundation for the development of related CALL software. It is then essential to consider the *assistance* and the *guidance* categories in the evaluation of any CALL software and especially the software design for self-access since these categories provide the necessary scaffolding for the independent learner working in a CALL environment.

The **ImPRESSions** design following the principles of Awareness, Authenticity, and Autonomy is the second contribution which makes it a powerful tool for independent language learning. The combination of the media facilitated in one environment, the computer, helps learners do an activity on their own that is difficult to be accessed especially in a foreign learning situation. Furthermore, the fact that it is designed using Web scripting languages adds an important feature for the future since the Internet and the Web especially are going to be a common resource of CALL in the near future.

Last but not least, the use of Lotus Screencam™ software has proved ideal for the type of research intended. The recording of the computer screen movements together with the observation are two complementary methods which provide rich and valuable data. It allows the observation of how learners organise their learning and which favoured strategies they are deploying. Furthermore, it provides more information than the actual tracking so far used in other research studies of this type in that we can observe the process as a whole. This method can show the relations between different elements and allow for a detailed description of the learner-computer interaction as described in the present study where we analysed the different ways learners operated using the help facilities.

In some cases, as illustrated in the description of the On-and-Off actions where students followed their reading with the mouse opens possibilities in using that technique in a more controlled study. This could reveal aspects of reading that were more difficult to research previously with other methods. This, however, may be somehow manipulating students' way of working if we take an authentic perspective, because there are types of learners who never use that "computing" strategy. It could reveal, for instance, information in a non-disruptive way about where exactly students encounter difficulties in reading the text.

As discussed in this study, help facilities are critical aspects of any CALL material but especially of the self-learning type presented here. The most important question ultimately to continue addressing is how CALL help can be designed and used to facilitate language learning.

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Appendix A:

- SILL questionnaire.
  (Oxford, 1990)

Strategy Inventory for Language Learning (SILL):

Version for Speakers of Other Languages Learning English.

This form of the STRATEGY INVENTORY FOR LANGUAGE LEARNING (SILL) is for students of English as a second or foreign language. You will find statements about learning English. Please read each statement. For each statement circle the response (1,2,3,4, or 5) that tells HOW TRUE OF YOU THE STATEMENT IS.

1. Never or almost never true of me
2. Usually not true of me
3. Somewhat true of me
4. Usually true of me
5. Always or almost always true of me

NEVER OR ALMOST NEVER TRUE OF ME means that the statement is very rarely true of you.
USUALLY NOT TRUE OF ME means that the statement is true less than half of the time.
SOMEWHAT TRUE OF ME means that the statement is true of you about half of the time.
USUALLY TRUE OF ME means that the statement is true more than half of the time.
ALWAYS OR ALMOST ALWAYS TRUE OF ME means that the statement is true of you almost always.

Answer in terms of how well the statement describes you. Do not answer how you think you should be, or what other people do. There are no right or wrong answers to these statements. Please complete all the items. Work as quickly as you can without being careless. This usually takes about 20-30 minutes to complete.

Part A

1. I think of relationships between what I already know and new things I learn in English.	1 2 3 4 5
2. I use new English words in a sentence so I can remember them.	1 2 3 4 5
3. I connect the sound of a new English word and image or picture of the word to help me remember the word.	1 2 3 4 5
4. I remember a new English word by making a mental picture of a situation in which the word might be used.	1 2 3 4 5
5. I use rhymes to remember new English words.	1 2 3 4 5
6. I use flashcards to remember new English words.	1 2 3 4 5
7. I physically act out new English words.	1 2 3 4 5
8. I review English lessons often.	1 2 3 4 5
9 I remember new English words or phrases by remembering their location on the page, on the board, or on a street sign.	1 2 3 4 5

Part B

10. I say or write new English words several times.	1 2 3 4 5
11. I try to talk like native English speakers.	1 2 3 4 5
12. I practise the sounds of English.	1 2 3 4 5
13. I use the English words I know in different ways.	1 2 3 4 5
14. I start conversations in English.	1 2 3 4 5
15. I watch English language TV shows spoken in English or go to movies spoken in English.	1 2 3 4 5
16. I read for pleasure in English.	1 2 3 4 5
17. I write notes, messages, letters, or reports in English.	1 2 3 4 5
18. I first skim an English passage (read over the passage quickly) then go back and read carefully.	1 2 3 4 5
19. I look for words in my own language that are similar to new words in English.	1 2 3 4 5
20. I try to find patterns in English.	1 2 3 4 5
21. I find the meaning of an English word by dividing it into parts that I understand.	1 2 3 4 5
22. I try not to translate word-for-word.	1 2 3 4 5
23. I make summaries of information that I hear or read in English.	1 2 3 4 5

Part C

24. To understand unfamiliar English words, I make guesses.	1 2 3 4 5
25. When I can't think of a word during a conversation in English, I use gestures.	1 2 3 4 5
26. I make up new words if I do not know the right ones in English.	1 2 3 4 5
27. I read English without looking up every new word.	1 2 3 4 5
28. I try to guess what the other person will say next in English.	1 2 3 4 5
29. If I can't think of an English word, I use a word or phrase that means the same thing.	1 2 3 4 5

Part D

30. I try to find as many ways as I can to use my English.	1 2 3 4 5
31. I notice my English mistakes and use that information to help me do better.	1 2 3 4 5
32. I pay attention when someone is speaking English.	1 2 3 4 5
33. I try to find out how to be a better learner of English.	1 2 3 4 5
34. I plan my schedule so I will have enough time to study English.	1 2 3 4 5
35. I look for people I can talk to in English.	1 2 3 4 5
36. I look for opportunities to read as much as possible in English.	1 2 3 4 5
37. I have clear goals for improving my English skills.	1 2 3 4 5
38. I think about my progress in learning English.	1 2 3 4 5

Part E

39. I try to relax whenever I feel afraid of using English.	1 2 3 4 5
40. I encourage myself to speak English even when I am afraid of making a mistake.	1 2 3 4 5
41. I give myself a reward or treat when I do well in English.	1 2 3 4 5
42. I notice if I am tense or nervous when I am studying or using English.	1 2 3 4 5
43. I write down my feelings in a language learning diary.	1 2 3 4 5
44. I talk to someone else about how I feel when I am learning English.	1 2 3 4 5

Part F

45. If I do not understand something in English, I ask the other person to slow down or say it again.	1 2 3 4 5
46. I ask English speakers to correct me when I talk.	1 2 3 4 5
47. I practise English with other students.	1 2 3 4 5
48. I ask for help from English speakers.	1 2 3 4 5
49. I ask questions in English.	1 2 3 4 5
50. I try to learn about the culture of English speakers.	1 2 3 4 5

Appendix B:

ImPRESSions©

- Texts (4 sessions).
- Questions and Feedback.
- Cultural Notes.
- Experts questions and answers.

Newspaper article - Session ONE :

Cash boost 'will prevent winter crisis in NHS'

BY PHILIP WEBSTER, POLITICAL EDITOR, AND IAN MURRAY

CUTBACKS in defence spending to bolster the NHS budget had already been drawn up by MoD officials (Michael Evans, defence correspondent, writes). After the Chancellor's order to pay back last year's £168 million overspending, a senior MoD official admitted that the cuts in "non-operational areas" had meant ministers taking "painful but manageable" decisions.

TONY BLAIR predicted yesterday that the health service would avoid a winter crisis after Gordon Brown announced an emergency £300 million for patient care.

Despite claims that the NHS would still be £50 million worse off than under Conservative plans because of increased inflation, Frank Dobson, the Health Secretary, said the money would both help with imminent difficulties and improve practice in the long-term by providing better community services.

The announcement coincided with Mr Blair's visit to London's Central Middlesex Hospital, which has made more beds available by moving elderly people to their own homes, where they recover with the help of social services staff.

Mr Dobson said that he wanted to start breaking down the "Berlin wall" between the health service and social service departments. The money will go to health authorities, but they will transfer it to social services where appropriate.

Mr Blair said the Government had kept a promise by providing the money and it was up to those running the NHS to improve it. No amount would ever be enough, but he believed the cash announced would avert a winter crisis.

The money-finding exercise, begun by Mr Dobson, Mr Brown and Mr Blair shortly after the election, has worried other ministers. The Chancellor raided other Whitehall budgets - notably Defence, and Trade and Industry - to secure the money that was needed to avert ward closures.

Some £168 million came from the Ministry of Defence in the form of a "fine" for overspending by that amount last year. Treasury sources gave a warning that other departments exceeding the targets of the Conservative Government for this and next year would be similarly treated.

The money is on top of the extra £1.2 billion announced in the Budget for the NHS for next year's spending. Some £100 million came from Margaret Beckett's Trade and Industry budget out of savings on nuclear decommissioning, and £30 million from administrative savings agreed with the NHS.

The Chancellor justified taking money from the MoD budget, saying there was overspending on the ministry's budget under the previous Government. "And it's right that we deal with every department in that way. Where there is overspending there has got to be this money taken back," he told BBC Radio 4's Today.

Mr Dobson said the money would help hospitals to keep services running seven rather than five days a week, stop beds from being closed and increase staffing. "The money will also be used to work on rehabilitation in hospitals, and the Central Middlesex is a brilliant example of what is needed.

"At the moment there are between six and seven thousand people in hospital who shouldn't be there." The money, he added, would be used to develop pioneering new approaches.

The Institute for Fiscal Studies, the economics research group, said that the plan will provide real extra money without breaking the Government's tough spending totals (Alasdair Murray writes).

But the IFS described some of the measures the Treasury has taken "as a bit of wheeze". In particular, the £102 million to be redirected from Trade and Industry can be viewed as a painless paper transfer of funds. This money was provided in the DTI's budget as a "provision" to cover potential losses at the state-owned British Nuclear Fuels that did not materialise.

The Times, 15 October 1997

Comprehension exercises

General comprehension question:

Choose which of the following statements most accurately summarises the news item:

The article:

- ○ **outlines how the government hopes to help the NHS during a severe winter.**
- ○ **details where funding for an extra NHS bonus will come from and why it is needed.**
- ○ **describes Tony's Blair's visit to a London hospital and plans to finance changes in the NHS structure.**

Feedback:

Option	Comment
a	The point of the article is not simply what the government hopes but how they WILL help the NHS during the winter months. Besides, it goes beyond this very fact. Read the article again.
b	That is correct. The article details the extra measures the government plans in order to overcome the present NHS crisis.
c	It is true that T.Blair visited a hospital but is this a relevant point that summarises the article? The visit is only incidental. Read again.

Detailed comprehension questions:

Select if the statements are **true** or **false** according to the article by using the drop-down menus. Once you are finished, click the **feedback button** below and go down the page to see your score. The ones that you get **right** will have a **tick**. You can also get **explanations** for the **wrong** ones.

1. Money saved by the MoD is to be transferred to NHS funds. - True or False? - ☐
2. It is suggested in the article that the Tory government would have provided more funding for the NHS. - True or False? - ☐
3. The Health Secretary hopes to bring the health service and social services departments closer together so that the money can be spent more appropriately. - True or False? - ☐
4. Blair considers this extra £300 million is enough to solve immediate problems for the NHS during the winter. - True or False? - ☐
5. Both the MoD and the Trade and Industry departments have had to pay penalties for spending too much money last year. - True or False? - ☐
6. The Chancellor has already confirmed that the NHS will receive over a billion in next year's Budget. - True or False? - ☐
7. The Health Secretary aims to keep hospitals open every day and to employ more staff. - True or False? - ☐
8. Thousand of patients are unnecessarily admitted to hospitals, according to Mr Dobson.. - True or False? - ☐
9. British Nuclear Fuel lost £102 million last year. - True or False? - ☐

Feedback:

Statement 1	The MoD did not save money but suffered CUTBACKS in their spending. CUTBACK='reduction of something'.
Statement 2	Even after the extra funding 'the NHS would still be £50 million WORSE OFF'. WORSE OFF='poorer'. Read the third paragraph again.
Statement 3	The metaphor that the article uses 'to break the BERLIN WALL between the health service and social services departments' implies to bring them together, as happened with divided Germany after the Berlin Wall collapsed.
Statement 4	Blair believed that the money would AVERT a winter crisis. AVERT='prevent', 'stop'. Paragraph 6.
Statement 5	This fact applies to the MoD for overspending but the Trade and Industry's money comes from savings. Read paragraphs 7 and 8.
Statement 6	To be precise, £1.2 billion were announced in the Budget by the Chancellor. Read paragraph 9.
Statement 7	The money will help to keep SERVICES RUNNING seven rather than five days. Hospitals never close! but some services do not run for lack of funding. The money will achieve not only that but also stop beds from being closed and allow for work on rehabilitation in hospitals. Read paragraph 11.
Statement 8	Mr Dobson's words are that people 'shouldn't be there' (in hospital) and not that they 'shouldn't be admitted'. End of paragraph 12.
Statement 9	The POTENTIAL loss did not occur because it 'didn't MATERIALISE'. Last paragraph. POTENTIAL='possible' MATERIALISE='come about', 'happen'.

Radio News – Transcript - Session ONE:

The government has confirmed that the National Health Service is to receive an extra £300 million to try to avert a crisis this winter. The money, which is in addition to that promised in the Budget is aimed at preventing hospital ward closures and reducing waiting lists. The news has been welcomed by doctors leaders and health service managers but they say more money is needed in the long term to modernise the service. As our Health correspondent Fergus Walsh reports, the Prime Minister was keen to stress the significance of the investment.

(background: T.Blair:"Hello, hello"...."it's good to see you. So when are you going out?")

The Prime Minister visited patients at a West London Hospital to publicise the government's 300 million pound cash injection for the NHS. Ministers deny the money was simply a sticking plaster for the winter months and the Prime Minister told reporters that his aim was to modernise the NHS for the long term.

"We don't just to want to put money in. We also want to use that money to lever in change, to improve the service for patients and to make sure that we are using every penny piece we are spending in the National Health Service efficiently and well."

£300 million is roughly what the NHS spends in 3 days. The extra government money will be an enormous help this winter but the flu epidemic or a bout of really severe weather will still be enough to push some of the hospitals to crisis point.

James Johnson at the British Medical Association said the money was a useful short term measure:
"It's never enough but it's very welcome and it will undoubtedly help us to ..help to get emergencies into hospital during the winter months and at the same time, hopefully enable that we can keep, at least, some non-emergency work going."

One of the biggest problems every winter is so-called "bed blocking", where usually elderly patients can't be discharged because of inadequate help being arranged in the community. The Prime Minister met nurses involved in a successful scheme which has helped reduce such problems. To be eligible for extra resources this winter hospitals will have to show that they have similar effective proposals for tackling waiting lists and emergency admissions."

Detailed comprehension questions:

Select if the statements are **true** or **false** according to the radio news item by using the drop-down menus.

Once you are finished, click the **feedback button** below and go down the page to see your score. The ones that you get **right** will have a **tick**. You can also get **explanations** for the **wrong** ones.

1. The extra £300 million given to the NHS is to stop hospitals closing down and to cut waiting time. - True or False? -
2. Doctors and managers say more money is needed very soon in order to update the NHS services. - True or False? -
3. The Prime Minister visited a London hospital to see how the NHS is using its cash bonus. - True or False? -
4. Ministers say that sticking plasters will be bought during the winter months. - True or False? -
5. Blair says he aims to use all the money as efficiently as possible within the NHS. - True or False? -
6. The NHS costs approximately £300 million to run for 3 days - True or False? -
7. Despite this extra money some hospitals will still have difficulty coping with the winter's flu epidemic. - True or False? -
8. A British Medical Association spokesman hoped that some non-emergency work could also be funded by this cash bonus. - True or False? -
9. "Bed-blocking" is a major winter problem in hospitals, as elderly patients cannot be sent home unless they can be looked after properly in their community. - True or False? -

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Feedback:

Statement **1**	In the introduction to the news item the newsreader only mentions 'preventing hospital WARD closures' and 'reducing WAITING LISTS'. WARD='section/unit of a hospital'. Listen to the first section again.
Statement **2**	The newsreader says 'IN THE LONG TERM' meaning in the future over time and not very soon as stated in the question.
Statement **3**	The PM visited just to PUBLICISE the government's £300 'CASH INJECTION=' the putting of extra money into a business, organisation or project in order to help it become more efficient'.
Statement **4**	'STICKING PLASTER' is only used as a metaphor in the text for 'a short term solution' and not as the actual material used to stick over a cut in order to protect it.
Statement **5**	The PM says 'to make sure we are using EVERY PENNY PIECE efficiently'. Listen to his words again.
Statement **6**	The newsreader reports: '£300 million is ROUGHLY what the NHS spends in 3 days'. ROUGHLY='approximately'.
Statement **7**	Both factors are the ones that will put hospitals into crisis in terms of coping with an increasing number of patients but the newsreader does not say that hospitals will not be able to 'cope with' the epidemic. COPE WITH='manage', 'deal with something successfully'.
Statement **8**	That is what he says. Listen to his words again: 'hopefully enable that we can keep, at least, some non-emergency work going.'
Statement **9**	The elderly patients cannot be DISCHARGED due to inadequate help in their community causing what is know as 'bed-blocking'. TO BE DISCHARGED='allowed to leave', 'release'. Listen to the last section.

Radio News – Transcript - Session TWO:

The Government has confirmed that Keith Hellawell, the Chief Constable of West Yorkshire, is to coordinate its campaign against drug abuse. His brief, when he takes up his new post early next year, will be to galvanise efforts to combat trafficking and to influence young people's attitudes towards drugs. Mr Hellawell's deputy will be Michael Trace currently the director of the Rehabililation of Addicted Prisoners' Trust. Here's our Social Affairs correspondent, Kim Catcherside.

Until now, no single agency has had total responsibility for the government's anti-drugs policy. About half a billion pounds is spent across a number of departments and more money is spent by charities working with addicts. Mr Hellawell says his first job will be to carry out an audit and then to co-ordinate and streamline the many anti-drugs schemes:

"What I'd like to change is ...is ..is to harness that and rather than.. than be individual schemes in one part of the country or another, to actually harness and focus those, so that we are getting ...we all doing the best to maximum benefit"

In the Drugs Rehabilitation Unit at Pentonville Prison today's announcement was followed with particular interest by inmates. One former addict, Chris, warns that putting people behind bars won't be enough.

"To just put them in prison is not a solution. That will not stop the drugs problem. ...ehm...It'll just take a few people off the streets, or a few more off the streets and when they get out of prison they'll be straight back on the drugs again."

The new drugs supremo is known to be sympathetic to that argument. His greatest challenge may now be to find the resources needed to keep people like Chris out of prison by treating their addiction.

Comprehension exercises

General comprehension question:

Choose which of the following statements most accurately summarises the news item:

- ○ **Solutions to the drugs problems in Britain, especially within prisons, are outlined.**
- ○ **The appointment of a co-ordinator for anti-drugs policies in Britain has been announced.**
- ○ **The anti-drugs policies co-ordinator outlines the work he has been doing recently.**

Feedback:

Option	Comment
a	Can you describe the solutions after listening to the news item? Listen to the news again.
b	That's right. The news is about the appointment of the drugs 'tsar' .
c	Has he already started working on drug abuse? Listen again.

Detailed comprehension questions:

Select if the statements are **true** or **false** according to the Radio news item by using the drop-down menus.
Once you are finished, click the **feedback button** below and go down the page to see your score.
The ones that you get **right** will have a **tick**. You can also get **explanations** for the **wrong** ones.

1. A policeman will take up the post of co-ordinator of the campaign against drug abuse early next year. - True or False? -
2. His targets include reducing sales of drugs and changing opinions of young people towards drugs. - True or False? -
3. Mr Hellawell takes over from the director of the Rehabilitation of Addicted Prisoners Trust. - True or False? -
4. About half a billion pounds is currently spent by charities working with addicts. - True or False? -
5. Mr Hellawell intends to bring together yet reduce the many anti-drugs schemes now in operation. - True or False? -
6. He says he plans to continue running individual schemes in separate parts of the country - True or False? -
7. Prison inmates showed little interest in today's announcement by the Government. - True or False? -
8. A former prisoner suggests that putting addicts behind bars does not stop them from taking drugs when they are released. - True or False? -
9. Mr Hellawell is now trying to treat addicts in order to keep them out of prison. - True or False? -

Feedback:

Statement 1	The word 'policeman' is not mentioned but 'Chief Constable' that is the rank in charge of the police force in a particular area. Check it in the transcript.
Statement 2	The newsreader describes that his BRIEF will be to GALVANISE efforts to fight against trafficking and to change young people attitudes. Listen to the first section again. BRIEF='official instructions to deal with something'. To GALVANISE='to cause somebody to make something suddenly'.
Statement 3	The actual director of Rehabilitation of Addicted Prisoners Trust will be his DEPUTY='second in command'. Mr Hellawell does not TAKE OVER the post from anyone. TAKE OVER='become responsible for the job after someone else has stopped doing it', 'replace'.
Statement 4	This amount of money is spent by several DEPARTMENTS, meaning government departments, apart from the money spent by charities. Listen to the beginning of the correspondent's report.
Statement 5	The correspondent does not say that Hellawell intends to reduce schemes but STREAMLINE the many schemes. STREAMLINE='arrange something to make it more efficient or effective'.
Statement 6	He wants to HARNESS the schemes' efforts rather than to have individual schemes working in different parts of the country. HARNESS='bring something together under your control to use it more efficiently'. Listen to his words again.
Statement 7	It was followed with PARTICULAR interest. PARTICULAR='special'. Check the transcript, paragraph 4.
Statement 8	The prisoner thinks that to put addicts in prison does not stop the drug problem. Listen to the prisoner's words again.'
Statement 9	Listen to the correspondent's last statement. Hellawell WANTS to treat addicts and keep them out of prison and NOW he has to find the resources, which is his greatest challenge.

Newspaper article - Session TWO :

Photo

Keith Hellawell: The tsar's first task is to draw up a national strategy for dealing with the burgeoning drug problem
Photograph:David Rose

'Tsar' Hellawell rules out legalisation of drugs

The country's first drugs "tsar" was formally appointed yesterday. But as *Jason Bennetto*, Crime Correspondent, discovers, there are worries that he lacks the funds to make the initiative a success.

A national debate on the use of drugs won the support of the "tsar" yesterday, but any question of decriminalisation or legalisation were rejected.

Keith Hellawell, Chief Constable of West Yorkshire, and the police chief's spokesman on drugs, said his first task was to draw up a national strategy for dealing with the burgeoning problem.

Considered a controversial, but forward thinking person, Mr Hellawell said he was confident that he could make a real impact in his £102,000-a-year role as UK Anti-drugs Co-ordinator.

Drug agencies yesterday welcomed the initiative but criticised the lack of funding.

The appointment coincided with the publication of Home Office figures that show the number of registered drug addicts increased last year by 17 per cent to 43,400 - although this is only a tiny proportion of users. New addicts aged under 21 rose by a third and the number of drug related deaths rose to about 1,800 in 1995, up by about 180 on the previous year.

Mr Hellawell, 55, who has hit the headlines with ideas such as legalising brothels, said he welcomed discussions about soft drugs. "The debate on decriminalisation has gone on for some time. I'm happy for the debate to go on, but it needs to be informed," he said.

He added: 'All that I have seen over the years about that debate has led me to believe that decriminalisation or legalisation would not help."

Ann Taylor, chair of the Cabinet sub-committee on drugs, said that the three key objectives for the forthcoming strategy were to reduce drug supply, health risks and demand amongst young people.

Mr Hellawell will be aided by his deputy Michael Trace, 36, currently Director of the Rehabililation for Addicted Prisoners' Trust, and a staff of six.

The drug chief will have direct access to the Prime Minister but no new money.

Mike Goodman, director of Release, the drugs and legal advice group, said: "It is unfortunate that the Government have refused extra funding for treatment and education and refused to look at the case for reforming the drug laws," he said.

"Regrettably that is like tying the hands of the drugs tsar behind his back."

The Independent, Wednesday 15 October 1997

Detailed comprehension questions:

Select if the statements are **true** or **false** according to the article by using the drop-down menus. Once you are finished, click the **feedback button** below and go down the page to see your score. The ones that you get **right** will have a **tick**. You can also get **explanations** for the **wrong** ones.

1. The debate to legalise the use of drugs was supported by the newly appointed drug 'tsar' yesterday. - True or False? -
2. Mr Hellawell will receive £102,000 a year to resource anti-drugs schemes. - True or False? -
3. Although the number of young addicts has increased recently, the number of drug-related deaths decreased by 10% in 1995. - True or False? -
4. Mr Hellawell is considered a controversial figure because he encourages debates on legalising soft drugs. - True or False? -
5. He thinks the debate on decriminalisation should continue in an informed way. - True or False? -
6. The drugs 'tsar' will have financial support directly from Tony Blair. - True or False? -
7. Mr Hellawell's first aims are to cut down general supply and demand of drugs and related health problems. - True or False? -
8. Drugs agencies were pleased with the new appointment, but disappointed by financial backing. - True or False? -
9. Mike Goodman suggests that refusing funding for education and treatment makes the drugs tsar's job impossible. - True or False? -

Feedback:

Statement **1**	The 'tsar' supported the debate on the use of drugs but legalisation was rejected.(Paragraph 1) The headline also describes this fact ' Tsar Hellawell RULES OUT legalisation of drugs'. RULE OUT='exclude', 'dismiss'.
Statement **2**	The money refers to Mr Hellawell's salary for the new post as drug 'tsar'. Read paragraph 4.
Statement **3**	The number of drug-related deaths did not decrease but rose. (ROSE) past tense of RISE= 'increase' . Read paragraph 6.
Statement **4**	Mr Hellawell has been controversial for his ideas on legalising brothels but we do not know if he has been controversial for encouraging the debate. He has HIT THE HEADLINES='get a lot of publicity in the news media' Read paragraphs 7.
Statement **5**	He wishes the debate to GO ON and that debate to be INFORMED. GO ON= 'continue', INFORMED='knowledgeable'.
Statement **6**	He will only have direct access to the PM but no money. Paragraph 11.
Statement **7**	The main three aims are targeted at young people and not simply to cut down general supply and demand. Besides, it is never mentioned that these aims are Mr Hellawell's. Read paragraph 12'.
Statement **8**	This fact is mentioned twice in the text. Paragraph 5: '...criticised the lack of funding'. Paragraph 12: 'It is unfortunate that the Government have refused extra funding...'
Statement **9**	Goodman uses the expression: 'tying the hands of the drugs tsar behind his back', meaning that lack of funding will prevent him from acting in the way he wants to.

Newspaper article - Session THREE :

Blair backs recruitment drive with tribute to his old teacher

Rebecca Smithers
Education Correspondent

TONY Blair yesterday hailed a teacher who eventually became the head of Eton as a key influence on his life, as he backed a £1.5 million advertising campaign to recruit more teachers and boost the demoralised profession.

In a cinema commercial to be launched nationwide on Friday, he names Eric Anderson - his house master and English teacher at the exclusive independent school, Fettes College - to underline the campaign's message that "no one forgets a good teacher".

Mr Anderson, who is now rector of Lincoln College, Oxford, also took up head-ships at Abingdon and Shrewsbury schools after his spell at Fettes. He and his wife were yesterday welcomed by Mr Blair at Downing Street.

Mr Anderson described Mr Blair as "a challenging pupil", and one who was not afraid to tackle people twice his size on the games field.

Mr Blair said: "Nothing is more important than educating our children and there is no more important group of people than our teachers. I am passionate about education, and I hope that many people who feel the same will respond to the campaign and join us to help raise standards."

He is one of 17 well known people in the commercial who name the teacher who most influenced their life. They include the designer and restaurateur, Sir Terence Conran, whose interest in art and design was encouraged by his pottery teacher, Don Potter.

The campaign is being launched by the Government's Teaching Agency, and spearheads a wider recruitment strategy, which includes a website, a teaching information line and new literature. The cinema adverts will be backed up by newspaper advertising next month.

The agency's chief executive, Anthea Millett, said 'the strategy was designed to address the shortage of applicants for initial teacher training, and that five new targets had been introduced.

These included making teaching one of the top three professions that graduates wanted to join, and attracting twice as many candidates to secondary initial teacher training.

Teachers' unions welcomed the initiative, but said the Government should be aware of the harsh realities of teaching.

Nigel de Gruchy, general secretary of NASUWT, said: "While I wish the TTA well in its campaign, advertising, no matter how slick, will count for nought unless the fundamental problems of workload, constant criticism, inadequate resources, relentless reform, large classes, Ofsted inspection-prompted panic and paperwork, pupil indiscipline and modest pay are tackled. Advertising must not be too far ahead of reality."

Peter Smith, general secretary of the Association of Teachers and Lecturers, said: "The fact that there is such a launch is evidence in itself of the imminent recruitment crisis. Teachers will welcome the drive to put more teaching staff into schools, but the effort will not succeed unless the pay, workload and morale of the profession is improved."

Doug McAvoy, general secretary of the NUT, added: "Advertising and encouragement alone will not overcome the problems of recruitment."

Photo

Skin, from Shunkie Anansies, is among 17 celebrities recalling their best teacher on video...

Photo

...as is Liverpool midfielder Steve McManaman

The Guardian, 15 October 1997

Comprehension exercises

General comprehension question:

Choose which of the following statements most accurately summarises the news item:

The item reports on:

- ○ **an advertising campaign to raise the status of the teaching profession.**
- ○ **an advertising campaign to improve the standards of education and conditions of teachers in British schools**
- ○ **an advertising campaign to encourage graduates to train as teachers.**

Feedback:

Option	Comment
a	Are you sure? Its intention was to boost the demoralised profession but not to raise its status. Read the article again.
b	This is what the main Unions wanted but was it really what the campaign was aimed at? Read again.
c	That's right. The campaign was designed to recruit more graduates to join teacher training courses.

Detailed comprehension questions:

Select if the statements are **true** or **false** according to the article by using the drop-down menus. Once you are finished, click the **feedback button** below and go down the page to see your score. The ones that you get **right** will have a **tick**. You can also get **explanations** for the **wrong** ones.

1. The Prime Minister supports the advertising campaign and praises one of his former teachers for encouraging him while at school. - True or False? - ☐
2. The Prime Minister is described as a difficult student who got involved in fights in sports lessons. - True or False? - ☐
3. The cinema advert is part of an ongoing recruitment campaign in the British media. - True or False? - ☐
4. During the campaign famous people will be asked to talk about how teachers have influenced their careers. - True or False? - ☐
5. Teaching is one of the top professions for graduates to join. - True or False? - ☐
6. Union representatives are pessimistic about the success of this campaign. - True or False? - ☐
7. Too much change, too many inspectors and not enough resources are some of the drawbacks of the profession. - True or False? - ☐
8. The present shortage of teachers prompted this advertising campaign. - True or False? - ☐
9. The Government is starting to address the fundamental problems of pay, discipline and workload within the teaching profession. - True or False? - ☐

TV News – Transcript - Session THREE :

The government tried to give teachers a makeover today with an new advertising campaign. Their message "You never forget a good teacher". For tonight's Your Life, Charlotte Hume has been finding out why the advertisement is necessary and whether it can persuade more youngsters to become teachers.

The old image of the teachers, nerdy, underpaid and dull, it's a stereotype that's damaged the reputation of the profession for over 20 years. New staff room recruits are scarce particularly in subjects like Maths, Science and Modern Languages. Now the government's launched an advertising campaign to make teaching a "cool" career choice.

Celebrities pay tribute to their favourite teachers. The message is simple: "Not everybody can be a teacher, you know. But if you... really love, you know,... getting across information and showing people about a subject you know a lot about, it is a great thing to get into."

Persuading today's youngsters to want to become tomorrow's teachers is an uphill struggle which is why we brought this latest advertising campaign to a school to see whether they think it is a job worth doing.

Teacher training courses aren't popular; in the worst cases, there are twice as many places as candidates. Does the advert work for these students?
"Well, it's a good advert, gets the message across, but still wouldn't make me teach, though."
"It does get across the point that teaching is a worthwhile job because these famous people living in their stardom are remembering teachers that had an influence on them."
"Seeing this advert hasn't made me change my mind at all"

So what about the teachers?
"It's not showing a sort of a dynamic teacher, it's not showing anything that could appeal to younger people."
"I think there are incredible opportunities in teaching and I think it is one of the professions that people just don't consider."

Will this campaign ring the changes? The government hope so. If the image of teachers is improved, maybe these children will break the mould and one day return to school as teachers. Charlotte Hume, 5 news.

Detailed comprehension questions:

Select if the statements are **true** or **false** according to the TV news item by using the drop-down menus.
Once you are finished, click the **feedback button** below and go down the page to see your score.
The ones that you get **right** will have a **tick**. You can also get **explanations** for the **wrong** ones.

1. The Government is trying to change the image of teachers by launching a new advertising campaign. - True or False? -
2. Teachers are stereotypically boring, old fashioned and not paid enough. - True or False? -
3. Math, Science and Modern Languages are particularly popular subjects to teach. - True or False? -
4. The Government now portrays teaching as a fashionable career to follow. - True or False? -
5. Teaching is a good job if you can explain things clearly to others, according to Skin. - True or False? -
6. It will not be easy to attract today's youngsters to the teaching profession. - True or False? -
7. Half the places at teacher training colleges are not filled. - True or False? -
8. The male teacher interviewed says the advert will not encourage pupils to become teachers. - True or False? -
9. The Government is certain that if the image of teachers is changed, more children will want to take up the career. - True or False? -

Feedback:

Statement **1**	The newsreader says 'to give teachers a MAKEOVER' implying to renovate their image in the eye of the public. To GIVE someone a MAKEOVER='to improve someone's image.
Statement **2**	All three aspects are mentioned by the reporter at the beginning of her report. DULL=boring, NERDY=old-fashioned and UNDERPAID=not paid enough. Watch it again.
Statement **3**	Those subjects particularly lack recruits. The word used is SCARCE, meaning there are not very many.
Statement **4**	This statement is false since the Government wants to MAKE it a 'cool' career, that is to say, in the future. They do not portray the profession as a COOL career. COOL (colloquial)= 'fashionable'. Check the transcript.
Statement **5**	The singer Skin states that 'if you love GETTING information ACROSS , it is a job worth doing'. GET ACROSS= 'communicate'. Watch the sequence again.
Statement **6**	The reporter mentions that it is an UPHILL STRUGGLE='requires a great deal of effort and determination'. Check the transcript.
Statement **7**	HALF of the places is the same as 'TWICE AS MANY places as candidates', according to the reporter. Watch again after the reporter enters the school.
Statement **8**	The teacher thinks 'it is not showing anything that could APPEAL to youngsters'. sth. APPEAL to sb.='to find something attractive or interesting.'
Statement **9**	According to the reporter 'the Government HOPE so and MAYBE children will pursue the teaching career', so they are not CERTAIN as stated in the question. Watch the end of the sequence.

TV News – Transcript - Session FOUR :

The Prime Minister was jostled and abused in East Belfast today by a loyalist crowd angry that he'd met and shaken hands with the leaders of Sinn Fein . Some people shouted 'traitor' at him as he did a walkabout in a shopping centre and he was forced to take cover in a bank.

Mr. Blair's meeting with the Sinn Fein leaders was the first by a British Prime Minister since Lloyd George in 1921. It took place behind closed doors at Stormont. Our Ireland correspondent, John Irvine, reports:
Late this afternoon Tony Blair got first hand experience of the Northern Ireland problem. These hard-line Unionists were furious over his earlier meeting with members of Sinn Fein.

(woman shouting: "your hands are covered in blood from Gerry Adams")

There were fewer than a 100 hecklers but they followed Mr. Blair. He had to be manhandled by his minders. RUC officers shielded the Prime Minister as he left. Downing Street said later he'd been unfazed by rowdy scenes that contrasted with the warm welcome elsewhere.
Mr. Blair was generally well received however the focus of attention was always going to be on handshakes with politicians, not the public.

In Derry he was welcomed by the leader of the SDLP, John Hume. In Craighalven he met David Trimble. The Ulster Unionist leader said it's safe to shake "my hand"; he was perhaps alluding to a later meeting and a handshake with Gerry Adams of Sinn Fein.

When Tony Blair flew into Stormont this afternoon, he became the first British Prime Minister to meet an Irish Republican leader for more than 70 years. Afterwards he was asked about the handshake:
"I...em... treated...eh ...Gerry Adams and the members of Sinn Fein in the same way that I treat any human being. And I think what is important about the situation here in Northern Ireland is that we do actually treat each other as human beings."

Mr. Blair had talks to all the parties; this is one of those such meeting. The encounter with Sinn Fein, however, was kept very private. That handshake was not for public consumption or posterity. Nevertheless, it was welcomed by Gerry Adams:

"Well, I think we are dealing with a man who...who certainly recognises this as a historic opportunity".

The jostling Mr. Blair experienced when he left Stormont, although an isolated incident, was proof of the controversy surrounding his first meeting with Gerry Adams, but the Prime Minister believes the time has come to stop ostracizing Sinn Fein and for that part, they now expect a meeting in Downing Street.
John Irvine, news at 10, Stormont.

Comprehension exercises

General comprehension question:

Choose which of the following statements most accurately summarises the news item:

- (●) **Tony Blair received an unwelcoming reception in East Belfast after shaking hands with Gerry Adams.**
- ( ) **Tony Blair shook hands with Irish leaders in crowded Belfast.**
- ( ) **Tony Blair had to be protected from angry crowds yesterday during a historic visit to Belfast.**

Feedback:

Option	Comment
a	That's correct. The focus of the news is on the unwelcoming way the Prime Minister was received by some after his handshake with Gerry Adams.
b	This is not mentioned in the TV news item. He shook hands with the public in Belfast and with Gerry Adams in Stormont. Watch the sequence again.
c	This statement is true, but does it really summarise the TV news item? Watch again.

Detailed comprehension questions:

Select if the statements are **true** or **false** according to the TV news item by using the drop-down menus.

Once you are finished, click the **feedback button** below and go down the page to see your score. The ones that you get **right** will have a **tick**. You can also get **explanations** for the **wrong** ones.

1. Crowds physically attacked the Prime Minister causing him to hide in a bank for protection. - True or False? -
2. The first time a British Prime Minister met a Sinn Fein leader was 1921. - True or False? -
3. The leaders met in a locked room. - True or False? -
4. Blair was well received by both the SDLP and Ulster Unionist leaders. - True or False? -
5. Almost 100 people shouted at Blair as he left the shopping centre. - True or False? -
6. Gerry Adams is the leader of the R.U.C. - True or False? -
7. Blair was reported to be upset by the rowdy scenes in East Belfast. - True or False? -
8. Gerry Adams was pleased that Blair took the opportunity to make history by meeting him at Stormont. - True or False? -
9. Blair considers it important to include Sinn Fein in talks about the situation in Northern Ireland. - True or False? -

Feedback:

Statement 1	They did not physically attack the PM, just JOSTLED and ABUSED him. To JOSTLE='to push someone when you are in a crowd' , ABUSE (in this context)='to say rude and offensive things to someone'.
Statement 2	This statement is not mentioned in the sequence. We are told that it was the first meeting since the last one in 1921 with Lloyd George. Check the transcript.
Statement 3	The meeting was only kept private but the room was not locked. The reporter simply says 'it took place BEHIND CLOSED DOORS', meaning the press did not have access.
Statement 4	The comment that the Ulster Unionist leader made: 'it's safe to shake my hand' implies that the PM was received with certain reservations by him.
Statement 5	The reporter describes fewer than 100 HECKLERS: people that feel angry and hostile. Watch the sequence in the shopping mall again.
Statement 6	Listen carefully. This is mentioned a couple of times. He is the leader of Sinn Fein.
Statement 7	The PM was UNFAZED by the rowdy scenes. UNFAZED='unconcerned', 'not worried or upset'. Watch the sequence after the woman shouting at him in the shopping centre.
Statement 8	That is what Adam says in his speech to the press after the meeting. Watch that sequence again.'
Statement 9	At the end of the news item, the reporter explains that Blair believes that it is about time to stop OSTRACISING Sinn Fein. OSTRACISING= 'exclude', 'cold-shoulder'.

Newspaper article - Session FOUR :

Blair barracked after historic handshake with Adams

Tony Blair was jostled and jeered by loyalists after shaking hands with Sinn Fein president Gerry Adams during a visit to Belfast. It was, says David McKittrich, Ireland Correspondent, a day which combined the promise of new beginnings with a sharp reminder of the persistence of conflict.

Tony Blair encountered both the rough and the smooth in Belfast yesterday. The smooth part came with what was by all accounts a cordial meeting with Gerry Adams, Martin McGuinness and other republicans in the inter-parts talks at Stormont.

When Mr Adams told him that he hoped he would be "the last British prime minister with jurisdiction in Ireland," he did so in a non-confrontational tone. When Mr Blair replied that "there is an opportunity and we've got to seize it because if we don't see it we may not see it again in my lifetime," the Sinn Fein leader seems to have been impressed.

Photo

Tony Blair is escorted through angry loyalist protesters at an east Belfast shopping centre shortly after meeting Gerry Adams.

The civilities which accompanied this, the first hand-shake between a prime minister and a Sinn Fein leader since Lloyd George met Michael Collins, were however in sharp contrast to the rough treatment Mr Blair received an hour later in an east Belfast shopping centre.

"Traitor," they shouted. "Your hands are covered in blood," they barracked him. The loyalist protesters were waiting, some wearing rubber gloves to show what they thought of the Blair-Adams handshake. "Shame," they shouted. One man kept up a metronomic chant: "Scum -scum - scum.' A woman yelled: You are contaminated. I'll not shake hands with him."

The Prime Minister took refuge in a bank before the security people got together to escort him away from it all.

David Trimble, the Ulster Unionist leader blamed the media, saying people had been "infuriated and goaded" by exaggerated reports of the significance of the occasion. He added: "I disapprove of what has happened but let's put the responsibility where it belongs."

The handshakes took place behind closed doors at the Stormont talks building.

Afterwards Mr Blair said: "I treated Gerry Adams and the members of Sinn Fein in the same way I treat any human being. What is important in the situation here in Northern Ireland is that we do treat each other as human beings. Everybody who is here has got to be committed to the principle of non-violence- anybody who departs from this will not be in these talks."

Mr Blair also held short meetings with the seven other parties. apart from Sinn Fein, who are in the talks. While discussions are still in their early stages, the British and Irish governments hope that today will bring the opening of substantive negotiations on what is seen as the most sensitive part of the talks, the question of Northern Ireland's future relations with the rest of Ireland.

Mr Adams later said approvingly: "We are dealing with a man who certainly recognises this is a historic opportunity. He recognises also there needs to be change to bring about transformation to consolidate the peace process. If there's going to be change, there needs to be change also by the British government and I hope Mr Blair brings that about.'

John Hume, leader of the Social Democratic and Labour Party, said of Mr Blair: "The very fact that he is coming to visit our towns and cities has strengthened the will of our people for lasting peace in an enormous way."

The Independent Tues, 14 October 1997

Detailed comprehension questions:

Select if the statements are **true** or **false** according to the article by using the drop-down menus. Once you are finished, click the **feedback button** below and go down the page to see your score. The ones that you get **right** will have a **tick**. You can also get **explanations** for the **wrong** ones.

1. The meeting between Blair and Adams was reported to have been problematic. - True or False? -
2. Adams hopes to be the last Prime Minister with jurisdiction in Ireland. - True or False? -
3. The first meeting between Lloyd George and Michael Collins was conducted in a civilised manner. - True or False? -
4. Some protesters wore gloves to symbolise their disgust at Blair's handshake with Adams. - True or False? -
5. The media is responsible for antagonising the crowds in East Belfast, according to Trimble. - True or False? -
6. The most controversial point of the negotiations concerns the future relationship of Northern Ireland and Ireland. - True or False? -
7. Blair discussed the future of Northern Ireland with seven interested parties. - True or False? -
8. Adams hopes that Blair can change the attitudes of the British Government towards the Irish problem. - True or False? -
9. John Hume says that Blair's visit has reinforced the public's hopes for peace. - True or False? -

Feedback:

Statement **1**	This is not reported in the article. The problems arose with loyalists in a shopping centre but the meeting with Adams was CORDIAL. (see paragraph 2)
Statement **2**	Adams hopes Tony Blair will be the last PM with jurisdiction in Northern Ireland. Please read carefully the first sentence of the third paragraph: 'Mr Adams told HIM that he hoped HE would be...'
Statement **3**	We don't know how that meeting went. The article only mentions that historic event. (read paragraph 4)
Statement **4**	The fact that protestors were wearing rubber gloves signifies that they did not want to be 'contaminated' by the PM who earlier shook hands with Mr Adams.
Statement **5**	D. Trimble did blame the media but for the exaggerated reports of the significance of the occasion. (paragraph 7)
Statement **6**	This is 'the most SENSITIVE part of the talks'. SENSITIVE: 'delicate', 'controversial' (in this context). Read paragraph 10.
Statement **7**	Blair had meetings with EIGHT parties: 'seven OTHER parties, apart from Sinn Fein'. 7 + 1 = 8 (paragraph 10)
Statement **8**	Adams words are: 'I hope Mr Blair BRINGS that ABOUT'. BRING ABOUT='to cause something to happen' (paragraph 11)
Statement **9**	His statement clearly says that 'Mr Blair's visit has STRENGTHENED the will of our people for lasting peace'. STRENGTHEN='reinforce' (last paragraph)

CULTURAL NOTES:

Session 1 Newspaper

NHS: National Health Service: A government organisation that provides all levels of free health care

MoD: Ministry of Defence.

Chancellor: *Chancellor* of the Exchequer is the minister in the British Government who makes decisions about finance and taxes.

Tony Blair: British Prime Minister, leader of the Labour Party. The youngest PM for 200 years, swept to power in a landslide victory in May 1997 after 18 years of Labour opposition.

Gordon Brown: Rt. Hon. Gordon Brown MP. Chancellor of the Exchequer (1997-). He is being touted as an "iron chancellor"

Conservative (capital C): refers to the Conservative party or previous government. The Conservative Party believes particularly in the importance of a capitalist economy with private ownership rather than state control. They are also referred to as TORY / TORIES(pl.)

Frank Dobson: MP for Holborn & St Pancras. He was appointed Secretary of State for Health on May 3, 1997

Whitehall: area in London where all the Ministries and most of the Government Departments are situated. It takes the name from the palace built in the time of Henry VIII in 1530.

Treasury: HM TREASURY is the government department that deals with financial matters.

Budget (capital B): annual announcement by the government of the country's spending and revenue plans

Margaret Beckett: MP for Derby South. Secretary of State for Trade and Industry (1997-98). Leader of the House of Commons (1998-).

Institute for Fiscal Studies: is a research institute which exists to provide top quality economic analysis independent of government, political party or any other vested interest. IFS exerts substantial influence through publications, the media, close contacts with civil servants and regular meetings with Cabinet and Shadow Cabinet members.

DTI: Department of Trade and Industry. Government department for business, trade and commerce

British Nuclear Fuel: British Nuclear Fuel Limited (BNFL) previously known as BNF before its privatisation. Its a leading specialist in nuclear technology and a global supplier of nuclear fuel products and services.

Session 1 Radio

National Health Service: A government organisation that provides all levels of free health care
Budget (capital B): annual announcement by the government of the country's spending and revenue plans

British Medical Association: is a professional association of doctors and trade union which plays an influential role in health care and health policy, in science and in ethics. They define themselves as an independent trade union, a scientific and educational body, a publishing house and a limited company, funded largely by its members.

Session 2 Radio

The Reahabilitation for Addicted Prisoners' Trust (RAPt): is an organisation that manages intensive treatment programmes for alcoholics and drug addicts in four prisons in the South East of England: Downview, Coldingley, Wandsworth and Pentonville.

Session 2 Newspaper

Home Office: is the Government department responsible for internal affairs in England and Wales. It is responsible for the police and immigration and deals with the protection and security of the public.

Soft drugs: are drugs which are illegal in most countries but which are not considered to be very strong or harmful, such as marihuana.

The Rehabilitation for Addicted Prisoners' Trust (RAPt): (as above in Session 2 Radio)

Release: is a 24 hour helpline established in 1967 for drug users, their families, friends and professionals which offers advice and counselling on a range of drug related subjects, including health, welfare and legal issues.

Session 3 Newspaper

Tony Blair: British Prime Minister, leader of the Labour Party. He took office in May 1997

ETON: A famous private boarding school which is used among others by members of the aristocracy and the Royal family for education

Fettes College: is one of Scotland's finest co-educational boarding schools

Downing Street: 10, Downing Street: Prime Minister's residence and office.

Teaching Agency: TTA is a government agency to promote the teaching career among the young.

NASUWT: is one of the largest teachers' trade union in Britain, with members in all sectors of the education service in the UK

TTA: is a government agency to promote the teaching career among the young.

OFSTED: The Office for Standards in Education (OFSTED) was set up on 1 September 1992. It is a non-ministerial government department, independent from the Department for Education.
OFSTED's remit is to inspect, report on and improve standards of achievement and quality of education through regular independent inspection, public reporting and informed service.

The Association of Teachers and Lecturers: is a leading professional organisation and trade union for teachers and lecturers in England, Wales and Northern Ireland. Membership is open to all teachers and lecturers, except headteachers and principals.

NUT: The National Union of Teachers is both a professional organisation and a trade union. Membership is open only to fully qualified teachers

Session 3 TV

None

Session 4 TV

Loyalist: (n) Supporters of the Northern Ireland community that believe in the retention of the Union (UK) and remain firm in their support for a British government

Sinn Féin: the political wing of the Irish Republican Army (IRA), is the oldest political party in Ireland. It takes its name from the Irish Gaelic expression for "We Ourselves". Since being founded in 1905 they have worked for the right of Irish people as a whole to attain national determination, and have elected representatives in every major Irish town and city.

Lloyd George, David (1863-1945). British statesman. During the First World War he succeeded Asquith as Prime Minister in 1916. In 1921 Lloyd George first had four meetings with Edmonn De Valera and later in the year met a full republican negotiating team led by Michael Collins. However, Lloyd George never managed to establish working relationships with republicans, but the talks exercise was in republican terms disastrous, leading to the Anglo-Irish treaty, the split within republicanism, the death of Collins and the cementing of the partition of Ireland.

Stormont now serves as the Belfast Headquarters of the Secretary of State for Northern Ireland, Northern Ireland Office Ministers and supporting officials. It is where the Parliament used to sit under its devolved Government. It is also the building where the peace process talks are being held. Stormont itself is not the name of a "townland" (the definitive Irish description of location). It appears to be a mid-19 century corruption of a former place name Stormont (a pronunciation still common in the Belfast vernacular until recent times) or Storm Mount.

Northern Ireland, province, integral part of the United Kingdom, is situated in the north-eastern portion of the island of Ireland. The majority of the people are descendants of Scots or English settlers who crossed from mainland of the UK after 1607. The remainder of the population is descended from the original Irish inhabitants, principally those native to the province of Ulster.

UNIONIST: (n) A believer in the political union between Northern Ireland and the rest of the United Kingdom.

RUC: Royal Ulster Constabulary is the police force based in Northern Ireland

Downing Street is the official residence of the British Prime Minister. It is often used to refer to the Prime Minister or the British Government

Derry takes its name from the Gaelic term 'doire' (oak good). It is Northern Ireland's second largest town. Derry has been deeply marked by the sectarian struggle. A significant event was 'Bloody Sunday' on January 30, 1972 during which 13 Catholics were shot by British paratroopers

Social Democratic and Labour Party, socialist party in Northern Ireland

John Hume MP MEP. Leader of the SDLP since 1979. His dialogue with Gerry Adams proved to be a key factor in the Peace Process leading to a cessation of violence declared in 1994. Awarded the 1998 Nobel Peace Prize Laureate together with David Trimble for his efforts to find a peaceful solution to the conflict in Northern Ireland.

Rt. Hon. **David Trimble.** MP, member for Upper Bann. Spokesman for Constitutional Affairs and leader of the Ulster Unionist party. Awarded the 1998 Nobel Peace Prize Laureate together with John Hume for his efforts to find a peaceful solution to the conflict in Northern Ireland.

Ulster Unionist Party (UUP) was formed in 1905 in response to the threat to the Union posed by the Home Rule crisis in Ireland. The founding father of the Party, Sir Edward Carson, viewed the establishment of a parliament at Stormont to be a dilution of the Union. Being the largest political party in NI, the UUP was called upon to form the first Government. The UUP remain true to their founding principle - commitment to the Union and British citizenship and is opposed to any form of nationalism.

Gerry Adams was elected as President of Sinn Féin in 1983. Adams was also elected as a Minister of Parliament from West Belfast during the same year. Refusing to take his seat in Westminster because of the compulsory oath of allegiance to the British Queen, Adams continued to campaign for the rights of Irish nationalists in September 1993. Gerry Adams along with John Hume played a pivotal role in reviving the Irish Peace Initiative.

REPUBLICAN: (adj) A person from Northern Ireland who believes that NI should not be ruled by Britain but should become part of the Republic of Ireland.

Session 4 Newspaper

Sinn Féin: (as above in Session 4 TV)

Gerry Adams: (as above in Session 4 TV)

Belfast, capital of Northern Ireland, was founded in 1177. Taken by the English in the 16th century, it was granted a charter of incorporation in 1613, and the immigration of Protestants was encouraged. Belfast was made capital of Northern Ireland in 1920, when the Government of Ireland Act partitioned Ireland. In 1921 the Northern Ireland parliament opened, and continued to sit at Stormont Castle until its suspension in 1972. It was subject to

bomb and fire damage between 1969 and 1994, when the city was the scene of Republican-Roman Catholic and Loyalist-Protestant disorder.

Martin McGuinness is Chief Negotiator of Sinn Féin. He was elected MP in the 1997 election, refusing to take his seat because of the oath to the British Queen.

Stormont: (as above in Session 4 TV)

Lloyd George: (as above in Session 4 TV)

Collins, Michael (1890-1922). Irish nationalist. He was a Sinn Féin leader, a founder and director of intelligence of the Irish Republican Army 1919. He played a major part in the negotiations that led to the establishment of the Irish Free State (1921). He was minister of finance in the provisional government of the Irish Free State (1922), commander of the Free State Forces in the civil war, and for ten days Head of State before being killed by Irishmen opposed to the Partition Treaty with Britain.

David Trimble: (as above in Session 4 TV)

Ulster Unionist: (as above in Session 4 TV)

John Hume: (as above in Session 4 TV)

Social Democratic and Labour Party: (as above in Session 4 TV)

EXPERTS QUESTIONS AND ANSWERS

READING COMPREHENSION

1. What can I do when I do not know a word?

Sheena:

"Well, you must decide whether you really need to know the meaning of the word. I mean, you might want to read on a little bit more and then see if it essential to your understanding. If it's an important word, it's likely to be repeated, either using the same word or using a word or phrase with similar meaning and that should help you work out the meaning of the unfamiliar word. Anyway, you can look up the unknown word in the dictionary, either using the dictionary in this program or using a dictionary...your own dictionary at home ...either a bilingual or a monolingual dictionary. You could also see if the word seems to relate to any word in your own language. But one good strategy is try and guess the meaning of the word, look at the grammar of the word, work out if it's ...it's a noun or a verb or an adjective... and what are the words surrounding it. Look at the meaning of the sentence and the paragraph ...it's likely to be a positive meaning or a negative meaning. Look at the word itself and analyse it into its parts: prefix, root and suffix; and see if you can work out the meaning from that. So guessing the meaning of the word is ...is a good strategy to have. But make sure that you really need to know the word in the first place. It's OK to ignore it, you know."

Tony:

"When you are reading and you come across a word that you don't know, you face a two-way decision: You need to decide: Is this word important enough for me to need to know what it means? or Can I ignore the word? and move on.
Now sometimes it's difficult to tell how important a word is until you have read another couple of sentences. The other day I was reading ...eh...a tourist brochure in Portuguese about the south of Brazil ... and ... the text showed a number of different places that the bus tour was going to go to on a particular day in the journey. And I came across the word 'malharia'. I didn't know what it meant, I couldn't see any real sense from words that I had seen which were... look similar to it, and I wasn't being able to get at it. I knew it was important, otherwise...I wouldn't know... I knew it was a noun, I knew it was a sort of place, I knew it was worth tourists going to ...but I couldn't work out what the ...eh... exact identity of the place was. So in that case if I wanted to make sense of the destinations on the itinerary I needed to ask for that particular word. But very often when you are reading a text you may be able to work out what approximately or sometimes precisely what the meaning of the word is. And ... so I would say, if possible, assume that you can guess the meaning of the word and try and do the first, once you've decided that you do think it is important enough for you to need to pay attention to it. "

2. How can I guess the meaning of a word?

Sheena:

"Well, this is a really useful strategy because you don't always have a dictionary handy. First of all, look at the word, look at the grammar of the word, and the words surrounding it. Is it a noun or a verb or an adjective? Then if it's... ask yourself questions like if it's an adjective, what does it describe? If it's a noun, is there an adjective that describes it? Is there a verb that's near? If it's a verb, is it modified by an adverb? Ask yourself these questions and see what the answers are. Then have a look at ...eh... the...eh ...sentence... the surrounding sentences and paragraphs... to see if there are any special words that signal a relationship with the sentence in which you've got the unknown word. Words which signal cause and effect, or exemplification or something like that. Words like 'because', 'when', 'in conclusion', 'nevertheless'... and that

should give an idea of what the word is likely to be. Then you can think of the general meaning of the ...eh...of the paragraph, of...of the text. Is it likely to be a positive word or a negative word? And this can be helped by actually analysing the word itself, breaking it up into prefixes and the ..the root and then the suffix...and see if these prefixes and suffixes are positive or negative. So it should give you a general idea, and this together with your background knowledge of the topic should let you know roughly what the word means...and then you can always check it afterwards in the dictionary if you want to be absolutely sure."

Tony:

"I think there are three basic ways you could work out the meaning of a word. The first is to use what you know about the topic. Sometimes your general knowledge of the issue that is in the text will help you to work out what the meaning of a word must be. Sometimes the words around the word you don't know, the other words in the sentence will help you to work out what sort of meaning a word may have. And the third thing you can do is to look at the word itself, to see whether parts of the word are like other words that you know, ... whether there are, for example, if you see a prefix 'de-' or 'non-' or 'ex-' you may be able to work out what that part of the word means and may be able to see that the rest of the word has a meaning for you."

3. When can I use skimming?

Sheena:

"Well, skimming is when you read quickly in order to get a general idea of ... of the meaning of a text. You don't want and you don't need detailed understanding. So we often skim-read when we glance through a newspaper to find out if there's something interesting to read...and we can often skim-read an ... an article just to find out if it is worth reading it in more detail. You can even skim-read the back of a book to find out if it is worth buying. It's something we do in all languages."

Tony:

"I think skimming is particularly important in the case of reading news reports because usually ...you read a news report because you know something about the subject already and you want to see what the most recent development is. So I think you may be able to skim, that is, to jump over the first parts of the text and to look at the important new information in the text. I think that is particularly important in news items. Often you find in a news report the first two or three paragraphs provide the information which are background for the people that don't know the story. So if you already have the background obviously you don't need to read these parts in such detail. So you can use skimming in order to let your eye move forward in the text to the point where you begin to see new information that you haven't had before.

4. How can I improve skimming?

Sheena:

"Well, one way is to try and read in chunks and not word for word. You shouldn't see your lips moving at all. You shouldn't be articulating when you read. Now, to read in chunks may...it's quite difficult. But there's a special exercise you can do. If you take ...eh...a text and then divide up the...eh... the text into phrases, clauses and phrases, they must go together grammatically like nouns and verbs,...nouns, adjectives and verbs. So if you make an exercise like this. So you divide it into phrases and you leave a big space between them. And then try you get your eye to move from one phrase to the next phrase, to the next phrase, reading it ... seeing it as a whole, taking it in as a whole, so that your eyes are not going back to a previous point. You are basically jumping from one chunk to another chunk. That should help to get the smooth

movement of skimming when you're reading in chunks. Another...another skill which could help you to skim is if you try and focus on the content words. Now, these content words are the ones that carry the message. They are very important words. They're words like nouns, verbs and adjectives. So if you can, try and focus on these content words, again getting your eye to move from the content...one content word or ... chunk which contains content words to the next. One way of training yourself doing this is to...again get a short text and blank out all the other small words and leaving only the content words. In that way you can train yourself to get your eyes to move along smoothly focusing on these content words. You can also improve skimming by just looking at topic sentences. Now topic sentences are sentences which sum up the basic idea of each paragraph, and most paragraphs will have a topic sentence, and most topic sentences are at the beginning of the paragraph. So if you had a text with several paragraphs in...then you can just underline or highlight the topic sentences and then read...or get someone else to do it, otherwise you would've read it in advance, and then just read from one topic sentence...move your eye from one topic sentence to the next and that will also help you to get a general meaning...get a general idea of the meaning of the text and it means that you are not reading word for word and all the details. Finally, I mean, skim reading can be improved by setting yourself a time limit but it's very difficult to judge how much you'll need...em....As a very rough rule of thumb, you could ...em...say you choose a text of about two hundred and fifty words and give yourself three minutes to read it and then adjust it accordingly. If you felt you needed more, give yourself more time, or if you manage to do it in less than that then reduce it. But remember you are not going to read fast, you are not going to skim unless there's some kind of pressure, otherwise you are going to take it nice and easy, and read word for word. So the final point, I would say is that 'practice makes perfect' so skim read newspapers regularly both using this program and at home and do it...eh...skim read for things that are of interest. Then when you find something of interest then you can read it in more detail.

Tony:

"I think skimming is one of those things which is most open to practice. In other words, you get better at skimming by practising skimming. I think the most important first step is to realise that you can quite easily skim in a foreign language just like you do in your own language. So in the same way as if you're reading a text in your first language. If it's a news report you don't work mechanically, methodically through all the words in the text. Once you realise that you can do that in English, then you can, for example, you can set yourself time limits. So you could decide, well, I am going to allow myself just 15 seconds, for example, to work out which of the paragraphs of this text contains the information that I am interested in doing. Of course you have to be strict with yourself, you have to keep to the time limit that you set. And I think you'll find as I've done in other languages that you become quite skilled at picking the bits that matter very quickly.

5. When can I use scanning?

Sheena:

"Well, scanning is when you read quickly in order to get specific information from the text. So it's like skimming, that you are reading quickly, but you are not looking for the general meaning but you are looking for details and you already have these questions in your head and you know what you are looking for. It's something we do in all languages...and...typical things that we will scan are things like...eh...telephone directory, when you are looking for someone's telephone number or a bus timetable, when you are looking for a specific time and date, when buses are coming or going...and, of course, we scan a newspaper. You might look for the weather forecast in the newspaper to find out what the weather is going to be like in the area that you are living in or the area that you want to go to. You might scan the TV programme to see if there's a sports event on that you are interested in. If you are business minded you might even scan the stocks and shares page to find out if your investments are doing well. So it is something that everybody does in all languages and it's particularly useful for newspapers.

Tony:

"The difference between skimming and scanning is that scanning is the sort of reading that you do, for example, when you want to look up somebody's telephone number in the telephone directory...or when you look up a word in the dictionary. So scanning is looking for a specific piece of information, telephone number or a word, which you know in advance you want. So in skimming you're seeing what information a text contains, in scanning you know that the information you want is there, and it's a question of finding it as quickly as possible.

6. How can I improve scanning?

Sheena:

"Scanning is perhaps a little easier than skimming because you're looking for specific information in a text and you have this information beforehand. You know the words or phrases that you're looking for, 'cause they are going to provide the answers that you want. Now, one of the best way of improving scanning is to try and increase your eye-span, increase your peripheral vision, this is what you can see at the sides of your eyes. One way of doing this is to either take a pencil or take ... take your finger or a pencil and run it down the centre of ...eh... the text and you should then be able to take in the information on either side of your...your pencil or finger and you should be able to identify the words that you're looking for. I mean, obviously it's important that you recognise the words that you're looking for...but this technique of running your finger down or a pencil, should increase your peripheral vision, and should help you scanning. You need to...you need to practise scanning regularly. So set yourself tasks on newspapers, both on the...the texts on this program and also outside. Set yourself a task, make a list beforehand of what you want to find out. Things like...eh...find out the temperature in the capital city of your country or find out specific sports results or find an article about your own country. As long as you have these tasks in advance, so that you know what you are looking for, then your scanning and your speed of reading should improve.

Tony:

"I think scanning is more difficult to improve than skimming because scanning really is only a question of, if you like, of time management. You want to... find a word and... you look at the text and you see how quickly you can find where that word is. Now, in the sort of texts that you might normally scan, the examples that I've given were a dictionary, and telephone directory, there isn't very much reason for reading around the word. So if you want to find the address...the telephone number of somebody called Brown then although you may find other... other words...other family names before Brown and after Brown you need to look at the specific initials. In other words, information either side of what you are looking for is of no value at all. You can make yourself better at scanning, again, by practice but I think that skimming is one skill that is more open to practice than scanning is.

7. What can I do when unfamiliar information is given?

Sheena:

"OK, well, you can get background information by using the help facility in this program. This will cross-reference you to ...to other sources of information, like the TV news, radio news, other newspaper articles on the same topic. So that should help to clarify some areas; and sometimes extra information is given in the program itself. You could also ask a native speaker or a fellow student, you never know, they might be able to help. And if you are reading newspapers at home always switch on the TV news because that could give extra information and has the added advantage that you've got up-to-date news, and you've got pictorial information with it. Some learner dictionaries give useful background information on cultural

topics. I think, the important thing is to...to gain as much background information as possible from different sources. You've got encyclopaedias, you've got CD-ROMs, you've got Encarta, you've got so many things to look at, get as much as you can."

Tony:

"Very often when we're reading it's the information that the writer doesn't give which is the problem. So if I'm reading a text and I see a reference to a woman's name. If I don't know who that woman is or why she's mentioned in the text, then I can't make as much sense of the text as I could, if I knew who she was. Now when you're reading a...newspaper in real life...you might ...be able to ask a native speaker to tell you about the person. Now, you may not have the native speaker there. If you don't have the native speaker then you could, if you had the right sort of encyclopaedia, you could look up the person's name in there. If you are using a program like you have on this computer you may be able to click on some of the key words in the text and the information as if from the encyclopaedia will be given to you. That is a particular advantage of the program you are using here."

8. How can I improve my reading?

Sheena:

"Well, the best...the best thing to do is to read anything and everything from cornflake packets to comics, to magazines, to novels, advertisements and so on. And read them in ...eh...read them in the way that you would read them in your own language. So, in other words, we don't read a telephone directory intensively and we don't read a bus timetable intensively or ...we don't even skim a bus timetable, we scan a bus timetable. So if you read them in the way that they are meant to be read then you're practising the skills of reading. You're practising skimming, you're practising scanning...and also try and use some of the strategies that we talked about like guessing the meaning of unknown words, trying to use your knowledge, your background knowledge to help the understanding, relating any unknown words to words in your own language and...and think as well about the writer, depending on what you are reading...Think as well about the writer...what's, what's his or her opinion, what are they trying...what attitude are they trying to convey to us?. So just read, read as much as you can and watch and listen to the news on the radio and TV as well because then all reinforce one another...So if you are reading newspapers both in this program or outside, remember also to watch TV, listen to the TV news...and... the more you ... you hear about something the easier is to understand it when you read it and vice versa. They are mutually reinforcing. The main thing is READ and enjoy reading.

Tony:

"I think the short answer is you can improve your reading by reading as much as possible. As much as possible in two senses: Firstly, to read as many texts as you can because reading is one of those skills that does get better the more you practise. And in the second sense, reading as widely as possible, reading as many different sorts of texts as you can. One of the advantages of reading texts in the subject that you know quite a lot about is that you're able to fit the information in the text into what you already know. The problem with that is that you may not notice some of the new words that are potentially going to help you in the future. You are more aware of that if you read a text on a subject that you know less about. So I think that there are some advantages in reading texts on subjects which are not within your professional field or even necessarily within your interest as a way of improving your vocabulary. It's also true, of course, that texts which are on a subject you're less familiar with make more demanding reading. So you can practise the sort of skimming and scanning techniques and guessing words from context...You can practise that easier on a text that you know less about."

LISTENING COMPREHENSION

1. What can I do when I do not catch a word?

Sheena:

"Well, if you don't catch a word, don't stop listening to the rest of the message. It's important that you don't miss what comes next. If it's an important word, it's likely to be repeated later on in the message, either using the same word or at least, the same idea with similar words. So you get another chance... you are going to get another chance to fill in this gap in the message. And if it is not an important word then don't worry about it, ignore it. I mean, you know that good listeners don't expect a hundred per cent comprehension. You shouldn't expect it either. Of course, if you...in this program you can play the tape again and try and catch it the second time round, and obviously, if you are making your own recordings at home...eh... you record news items at home, you can play them as often as you want. But I think the main thing is not to stop listening and don't expect a hundred per cent comprehension."

Tony:

"When you don't catch a word when you are listening to somebody, I think, there are various things you can do. It's gonna depend on your situation. ...eh... If you're listening to the radio or to the television ...eh... not to this program but out there in the real world, then obviously if it's a radio programme you are listening to, then assuming that you're able to record it, of course, you could play it again. The same would be true of watching a news programme on television. But there are going to be many circumstances when you aren't able to record the programme and you don't have the chance to listen again. So if you don't catch a word when you are listening to a programme live and you can't repeat, I think, the first thing to bear in mind is how important is that word. Try when you are listening not to focus on individual words, unless from the way the speakers says it, it seems that they're particularly important. So if a word is said slowly or loudly or with particular stress, or is said on its own, that usually suggests the speaker thinks it's important. And if you are not able to catch a word in that case then you may have to listen on and see if you can work out the meaning from hearing the next part of what the speaker says. But when you are able to record, then I would try not to listen to individual words the first time, to listen through and then when you replay, to try to identify the individual words at that stage. But it's most important in listening more than in reading to try to understand the general point of what someone's saying as they're saying it."

2. What can I do when I do not understand a word?

Sheena:

"Well, if you don't understand the meaning of a word, don't stop listening to the rest of the message, you don't want to miss what comes next by stopping and thinking too long about the meaning of one particular word. Perhaps the rest of the text will help you to understand the...the meaning. You can always jot it down very quickly on a piece of paper and check it afterwards... in the dictionary or by asking someone...or even by trying to guess the meaning of the word... but the important thing is not to stop listening just because of one word and also not to lose confidence."

Tony:

"I think, in general, when people are listening to a foreign language being spoken, there are three things they can do when they don't understand a word. The first one is to bear in mind what you know about the subject. In most cases if you are already familiar with the topic that's being talked about, some of the new language that the speaker uses can be understood in the

light of what you already know. Second thing you can do is to...try to work out the meaning from the parts of the word that you recognise. Now, this is usually more difficult in listening than in writing. So when you are reading, you are able to have the word fixed in front of you, and you can analyse and study it. That's more difficult if you are speaking a foreign.....if you're listening to a foreign language. The third thing you can do is to listen to the words around the word that is the problem or the word that you don't know. You may be able to listen on to what the speaker says next and from that work out what he or she must've meant. Now, I said in general listening to foreign languages can be helped in those ways. There's a particular problem about English and, that is that English is spoken rather differently from the way that you may be used to reading it in print form. So there are certain things that happen to English words to make them more difficult to understand than they would be in print. And one of the things that you have to get used to, as a listener to English as a foreign language, is to only realising what the speaker had said some time after the word has been said, when you then realise it's a word that you know. I had a student recently who was a student of Science and he had never heard the word c...a...r...b...o...n before. So when the speaker he was listening to said the word 'carbon', he didn't actually recognised it as the word that he knew only too well but pronounced as /kar'bon/'."

3. What can I do when I comprehend less than 50%?

Sheena:

"Well, don't be depressed, I mean, understanding less than fifty per cent is better than understanding nothing. Of course, authentic material is going to be difficult to understand but you should be pleased with the amount that you managed to comprehend....eh...you can...you can help yourself to improve, though. When you are listening to something in your own language you usually have some knowledge about the topic and if you don't, it's a bit difficult, isn't it? Well, it's just the same in English. You need to get as much background information about the topic as possible and you can do this in the program by using the help facility,...and cross-referencing to other sources about the same topic: the TV news, newspaper articles that you can read about it. You can also gather vocabulary about the topic...associated with the topic and that will help you...eh... by...from all these different sources or even find some pictures or photographs associated with the topic so that will help as well. So you've got a vocabulary list, you can check the pronunciation in a pronouncing dictionary. So you can recognise them in their spoken form and that should help...the...both...the background knowledge, and the vocabulary should help you to understand a little bit more than fifty per cent."

Tony:

"Understanding less than 50 per cent might seem to be a problem but, in fact, in a lot of spoken language is probably sufficient to understand only half of what someone says. In other words, it may not matter for your understanding of a news report that you think that you only caught half the words because catching all the words might mean making more than adequate sense of the whole thing. I think there's a particular striking example of this in the case of TV news reports. If rather than concentrating on the words the speaker is using, if you take advantage of the background information. Things like the scene where the reporter is talking from, it might be the still pictures, the photographs they usually show behind the newsreader to give background information about the topic. Those sorts of things should help you to understand what's going on. I was once listening to Irish television in the west of Ireland, and the programme was in Irish, that is, in Irish Gaelic, not in English. And the first news report I understood possibly 10 per cent of the words, the ones that were the same as in English, but I knew from the story that the police had had to close a road near where I was staying because there'd been a landslide and the traffic had actually been stopped. They were not allowing the cars to go through. Now I knew all of that because that was all the pictures showed and I knew there was a problem because otherwise it wouldn't have been on the news, ...and I was able to judge the extent of

the problem from seeing whether the cars were allowed to go by where the landslide had occurred, whether they were being stopped. So, just one example of the sort of visual information you can use to understand more of the message. So understanding less than 50 per cent of the words may actually be more than adequate."

4. What can I do when I cannot follow the speed of the speaker?

Sheena:

"When you can't change the speed one thing you can learn to... one thing you can do to learn to cope with is to read the text at the same time that it is being spoken, in other words, reading the transcript of the text which this program provides. Notice which words are spoken more loudly, in other words, which words are stressed. These tend to be the content words, the ones that carry the message. The nouns, the verbs and the adjectives, and they will be said just that ...little bit more slowly and a little bit more loudly than the other words. So if you recognise these stressed words even if the speed seems quite fast altogether then you'll understand the general...if you recognise these and understand them then you'll understand the general meaning and I don't think you need to expect more than that. Just listen for the stressed...stressed words, listen to the tape again after you have listened and read it at the same time, put away the written text, and listen again and see if you can hear these stressed words which will carry the general meaning."

Tony:

"Speed is probably the strongest impression that we all share when we are listening to a foreign language because we find it difficult to understand, to process the words as they're being said. It's... then strikes us that the speaker must be speaking fast rather than that we are having difficulty in listening at the same speed as the speaker is using. So, first of all, you have to get used to the feeling that the words are running ahead of you, that's a natural feeling, and it would also be true, I think, if you were listening in your own language to somebody talking about a subject that you didn't know very much about. In real life, of course, as opposed to working with a computer, in real life, if you are listening to somebody who's talking too fast, you may be able to ask them to slow down. Obviously it's easier to do that in a conversation one to one than if you are listening in a large group of people, say, watching a lecture. But you may be able to get the speaker to slow down for you. Another thing you could do for yourself when you are listening to English outside this lab would be to record TV news items or radio news items and to play them again. Now, if you have the right cassette recorder you may be able to slow the soundtrack down. There are one or two recorders on the market which allow you to do that."

5. What can I do when the speaker has a strong or unfamiliar accent?

Sheena:

"Don't worry about it 'cause every language has a variety of accents. Don't expect everyone to speak the same accent. An interesting thing to do in this program is to read the transcript at the same time as listening to the text and notice where the pronunciation is different and mark these differences on your text and then afterwards you can always check the differences in the dictionary. Well, did you know, for example, that the Scots pronounce /wh/ as in 'what', 'where', 'why' and 'when' and English...Standard English say /w/. The accent will be /wat/, /wea/, /wai/, /wen/. So it is interesting to notice these differences and to be aware of them and not to expect everyone to have the same accent. And one way of improving your listening in this area...your sensitivity in this area...is to listen to as many accents as possible. I mean, tune in to TV and radio, ones that have definite regional...regional accents and see if you can recognise big differences between them."

Tony:

"I suppose the first thing to say is that I think the answer depends on where you are. If you are studying a language in a region of the country where their local accent is different to what you are used to, then there are strong reasons for you doing your best to get familiar with the accent. I think it's different if you are listening, for example, let's say, a Canadian reporter reporting on the BBC in Britain....em...In that case, then, it may be less important to you in the long term to be able to follow that particular accent. As to what you can do when you can't follow the speaker because of their accent...em...In the first case, that is, the first situation: if you are in an area where the accents you are unfamiliar with it but you're going to hear it a lot. Then you need to get used to, as if it were, noticing which parts of the accent are different to the way that you are used to hear the sounds made. For example, when I first went to Sweden I had studied Swedish in a teach yourself book and so I got used to the phonetic transcription in the book that I was reading. So I had a rough idea in my head of how I thought Swedish would sound. It happened, although I didn't know it, the place that I was going to, was the southern most province in Sweden, right in the south, near Denmark and it's...it's an area called Skåne. Now, in that area they pronounce where they live as I've just done, they say /skeuna/. In the rest of Sweden, it is pronounced /sko:na/. So once I knew that they say /skeuna/ then I was able or I needed, whenever I heard the /eu/ sound ...as it were, to translate it in my head into /o:/. And I often found when I...when I translated the sound in my head I then recognised the word. It was the same thing with the way they pronounce 'R'. In the south of Sweden they produce an 'R' like in French, whereas in the north of Sweden they produce an 'R' as in Italian. So again I had to..., if I heard a word like /reu/ then I had to translate that into /ro:/ and then I knew that it meant 'raw' in English that is 'uncooked'. So picking up on the main differences between the accent that you are listening to and the one you are used to is a procedure that you need to go through. So if, for example, you are based in Scotland, clearly there are advantages in being able to recognise the main differences between the Scottish accents and the English accent that you may be used to."

6. What can I do when I hear too much unfamiliar information?

Sheena:

"Well, don't worry about it...native speakers of English will have difficulties if there's too much unfamiliar information. We need to know more about the topic. Now, one thing you can do in this program is to use the help facility and get into the section that gives you background information on the topic, and you can also see that topic is treated in different ways by different newspapers, the TV news, different radio programmes and that should help you to fill in some of the information. There may be some pictures or photographs about the topic which will also help. One way of.....one thing you can get from this cross-referencing is vocabulary associated with the topic but remember that information...it is not always the language which is the problem...if you feel that there's too much information there...unfamiliar information...it's not always a language problem. It could be a cultural problem...and in this you might find it useful to speak to a native speaker about these aspects to try and get some more information."

Tony:

"When you hear too much unfamiliar information then I think... what you do about it again depends on the circumstances in which you are listening. If you're listening to a program using the computer then you can rewind and play it again, you can also slow down. That may help you to identify things which you didn't catch the first time round. But then if you find that it is the information that is the problem, that is, the background details that are the problem, then you would have to resort to things like using the dictionary. For example, if you recognise a word you're confident that you know what the word is but you don't know understand what it means or why it's being used, it may be that looking it up in a dictionary you may locate a second or

third meaning of the word that you were unfamiliar with. You could also, if you are able to, you could also record programmes, you could then listen to them again, if you are able to on your cassette recorder you could slow them down. All of these could help you identify things that you didn't catch the first time.

7. How can I improve listening to the news on the radio?

Sheena:

"Ok, well, first of all, don't expect to understand everything. Remember that it's quite difficult listening to the news when you don't have visual clues to help you. So good listeners, anyway, as you know, tolerate partial comprehension. So don't expect to understand everything, at least, you can understand something. Secondly try to keep up with what's happening in the news and so you will have some...some understanding of the topic when you hear it. Watch the TV news...read the newspaper regularly, so you know what's happening and then you can also build up some vocabulary associated with the topic. Thirdly don't stop listening if you don't understand a word, either you don't catch it or you don't understand a word otherwise you are going to miss the rest of the message and you'll have even less understanding. You can always check on these words later if you managed to jot it down or look at the transcript of the text if you are using this program, anyway. Fourthly, make your own recordings of news programmes outside...and play them as often as you like. Make yourself a little task sheet, divided into PEOPLE, PLACES, and EVENTS...and you can just jot down the important words...under these appropriate...under these columns which should give you the...the main idea of ...of what's happening in the news item. Finally, listen to all sorts of programmes, again don't just stick to the news, but listen to...to chat shows...to plays, if you can, to short stories...and watch TV as well because then you'll have the visual clues which will help you. You should then hear...by listening to all sorts of different things...you should hear, different accents, different speeds of delivery,...eh...different ways of presenting information and it can only help you develop your overall ability in listening to the news."

Tony:

"To improve the listening to the news on the radio obviously you can practise. But one way that I suggest you can make a conscious effort to improve the way you listen is to listen for items where you get a sequence of newsreader, reporter and interviewee. Now, I suggest this because listening to the newsreader will help you to understand the reporter, and listening to the reporter will help you to understand the interviewee. And the reason for that is to do with the sort of language that they are using, at least, in English. In most cases, well, in all cases the newsreader is reading from a written text, so they will tend to speak more slowly and to produce...eh...sentences. Sentences that have a beginning and an end because they are written down. When you come to listen to the reporter you can use what you've understood from the newsreader as setting the scene for what you're going to hear from the reporter. Now, most reporters also work, at least, from written notes. So when they are speaking, they are not speaking spontaneously, off-the-cuff. What they're doing is speaking aloud words that they have written down in some form on paper. You can then understand the way that they set the scene for the interview. Now, in the interview, usually the person being interviewed, the interviewee, is not speaking from notes and may not have rehearsed what they are saying so they are more likely to produce incomplete sentences, words that you are unfamiliar with and so on. But by listening ....By concentrating on listening to the newsreader first and then the reporter you may be able to make more sense of things like words that the interviewee says unclearly that you heard more clearly from the one of the first two speakers."

8. How can I improve listening to the news on television?

Sheena:

"Well, this isn't quite as difficult as listening to the news on the radio because you've got the visual clues. And, in fact, there are certain features of the television news which you can play around with and experiment with. One thing to do is to experiment with the volume... You can turn the sound down and just watch the pictures and see how much information you can get from the pictures and then play the extract again and listen to the news. This, of course, assumes that you have recorded the programmes before hand. Another thing you can do is to watch the news ..at.. on different channels and at different times. So what you didn't understand the first time round...the early evening news on one particular channel, you can see it again treated in more or less the same way on another channel later and you can even listen to it again later on if you didn't get everything the second time round. So this is a quite good facility TV news has. Another thing, obvious thing, read the paper before and after the news item ...and you will find that your background knowledge probably increases especially with the news items that last for more than one day. You get some that run for two or three days. So all these things should help your understanding of the TV news and I hope your general ability to listening to the news."

Tony:

"Firstly, I'm gonna suggest two things which I think are ...well, which are not to do with the language that you hear. The first one is to make conscious use of the visual information surrounding the news item. The photographs behind the newsreader. Any photograph they show during the report...and the background scene from any location reporting that you see. What you see will, to a large extent, compensate for what you can't understand as you listen. And the other non-listening thing you can do is to concentrate on items of television news that you know something about or that you can read something about. Now, of course, within the program on this computer you'll be able to read printed texts which are related to the topic that you hear about on the news. So if you find that a news item is particularly difficult to follow, either because of the language or because of the information, then I suggest you move on to the printed text and that will help you to see in a fixed printed form some of the words that you need to understand in speech."

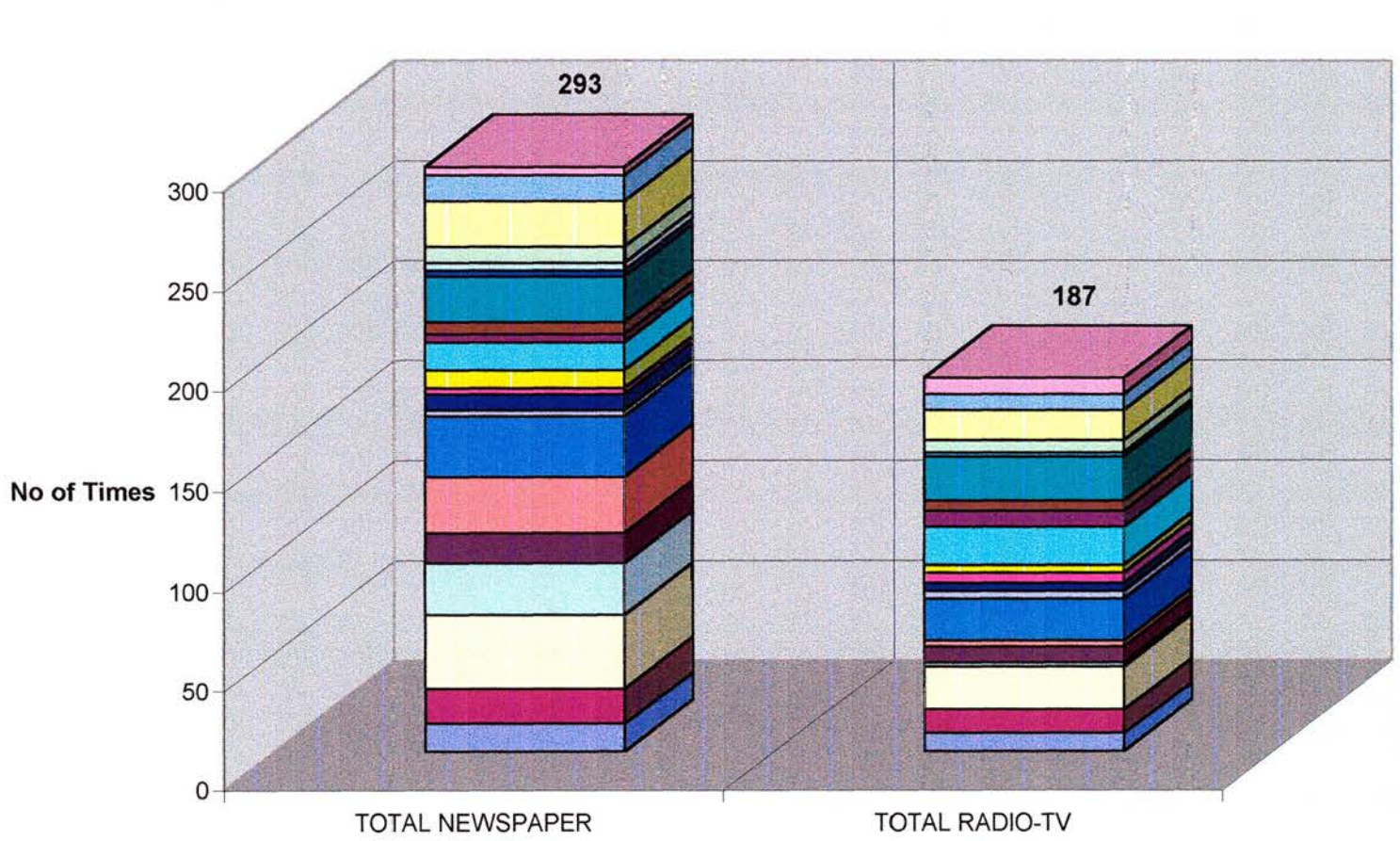
Appendix C:

Results:

- Graphs
- Tables
- Statistics

Graph GD1

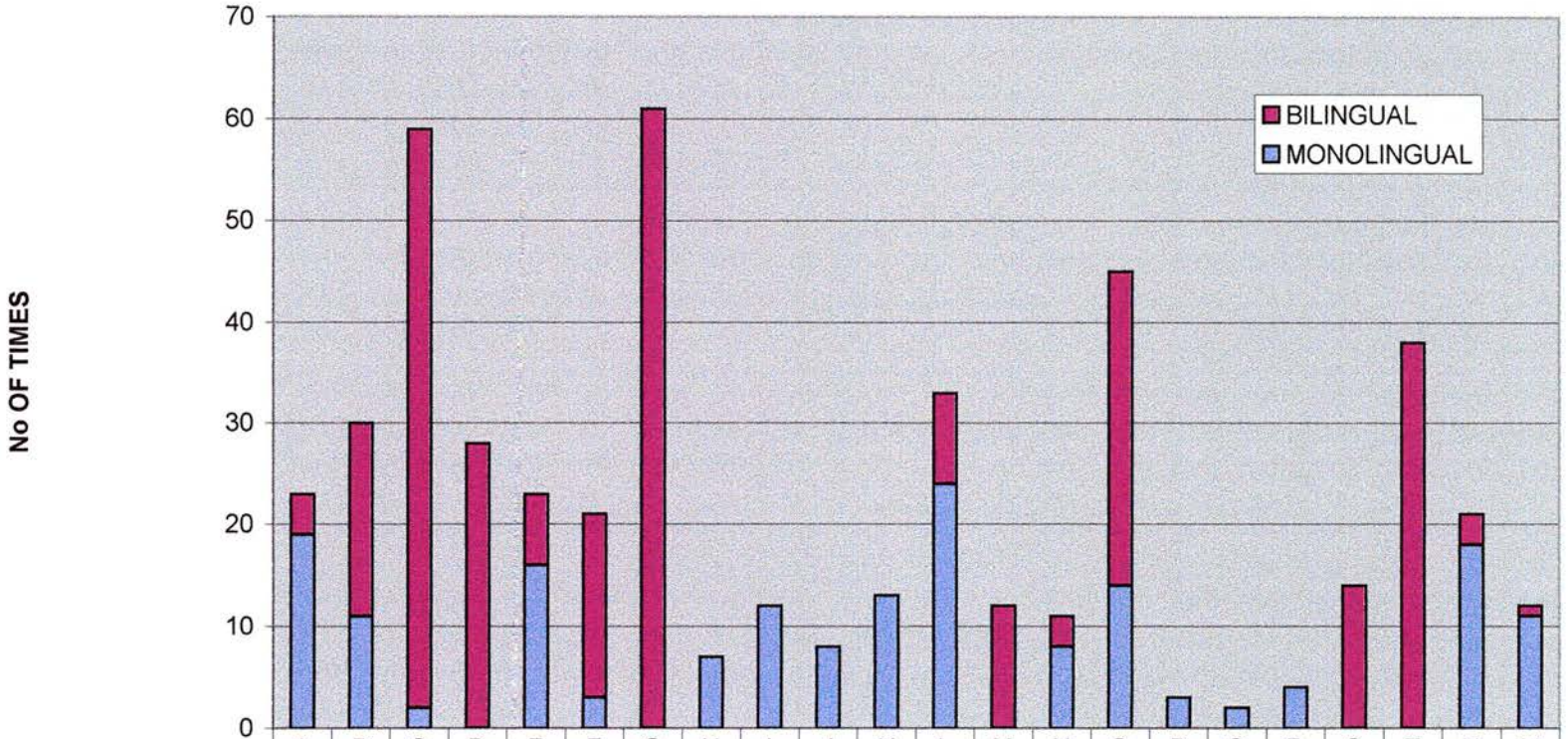
USE OF DICTIONARY: CONTRAST NEWSPAPER - RADIO/TV



STUDENTS	N	R-TV
V	4	8
U	13	8
T	23	15
S	8	6
R	4	0
Q	0	2
P	3	0
O	23	22
N	6	5
M	4	8
L	14	19
K	9	4
J	3	5
I	8	4
H	3	4
G	40	21
F	18	3
E	15	8
D	26	2
C	37	22
B	18	12
A	14	9

Graph GD2

USE OF DICTIONARY: MONOLINGUAL / BILINGUAL



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
BILINGUAL	4	19	57	28	7	18	61	0	0	0	0	9	12	3	31	0	0	0	14	38	3	1
MONOLINGUAL	19	11	2	0	16	3	0	7	12	8	13	24	0	8	14	3	2	4	0	0	18	11

Table D1

TYPE OF DICTIONARY: MONOLINGUAL – BILINGUAL: Times used																			
ST	SESSION 1				SESSION 2				SESSION 3				SESSION 4						
	Monolingual		Bilingual		Monolingual		Bilingual		Monolingual		Bilingual		Monolingual		Bilingual		**Total**	**Total**	TOTAL
	Newsp	Radio	Newsp	Radio	Radio	Newsp	Radio	Newsp	Newsp	TV	Newsp	TV	TV	Newsp	TV	Newsp	Monolingual	Bilingual	
A		2	2		4	2	1	1	5	1			1	4			19	4	23
B	3	2			5	1	1	3			6	2			2	5	11	19	30
C		1	3	4			11	10			13	4	1		1	11	2	57	59
D								8			10				2	8	0	28	28
E			1	1	6	2			7		4	1		1			16	7	23
F			3		1	1	2				5			1		8	3	18	21
G			3	5			6	10			9	6			4	18	0	61	61
H					2	2				2				1			7	0	7
I					3	3			5				1				12	0	12
J		1				1			1	4				1			8	0	8
K		1			1				4	1			1	5			13	0	13
L	4	3			6	4			5		1	7	2		1		24	9	33
M							4				3	2			2	1	0	12	12
N		1			2	2			2	1					1	2	8	3	11
O			1	4	8		1	4	1	1	12	2	4		2	5	14	31	45
P						3											3	0	3
Q					2												2	0	2
R						1			3								4	0	4
S							5	4			3				1	1	0	14	14
T			1	4			8	5			12	2			1	5	0	38	38
U		2			4	1			6	1	3		1	3			18	3	21
V					1	1			2	1			5	1	1		11	1	12
TOTAL	7	13	14	18	45	24	39	45	41	12	81	26	16	17	18	64	175	305	480

Shadowed cells indicate technical problems

Table D2

SESSION 1: Newspaper

		GENERAL COMPREHENSION TASK				DETAILED COMPREHENSION TASK												
						TEXT						Sub Total	QUESTIONS			FEEDB.	OTHER	Total
		TEXT		GQ	Feed	Before doing Qs		When doing Qs		When Feed			Only Qs	When Text	When Feed			
ST	Option	R	N			R	N	R	N	R	N							
A	B1							2				2						2
B	A							1				1		1			1	3
C	B1		1						1			1					1	3
D*	B1											0						0
E	B1											0		1				1
F	B1							1	2			3						3
G	B2							1				1						1
H	B1											0						0
I	A											0						0
J	B1											0						0
K	B2											0						0
L	B1							1	1	1		3					1	4
M	B2											0						0
N	B2											0						0
O	A											0					1	1
P	B1											0						0
Q	B1											0						0
R	B1											0						0
S	B1											0						0
T	B2					1						1						1
U	B1											0						0
V	B2											0						0
TL			1			1		6	4	1		(12)		2			4	19

* Technical Problems: dictionary did not download.

OPTIONS:

A = READS TEXT FIRST

B1 = READS QUESTIONS FIRST, THEN DOWNLOADS THE TEXT & BEGINS TO ANSWER

B2 = READS QUESTIONS FIRST, READS THE WHOLE TEXT, & THEN BEGINS TO ANSWER

R = Related to questions / N = Non-related to questions

Table D3

SESSION 2: Newspaper

	Option	DETAILED COMPREHENSION TASK											OTHER	Total
		TEXT						Sub Total	QUESTIONS			FEEDB.		
		Before doing Qs		When doing Qs		When Feed			Only Qs	When Text	When Feed			
ST		R	N	R	N	R	N							
A	A			3				3						3
B	A			2	1			3						3
C	A	4	3	1				8		1		1		10
D	A	2	3	2		1		8						8
E	A	2						2						2
F*	B1							0	1					1
G	A	3		1	1			5		5				10
H	A							0				2		2
I	A						1	1		1	1			3
J	A							0				1		1
K*	A							0						0
L	B2	3						3						3
M	A							0						0
N	B2	2						2						2
O	A	1	2					3		1				4
P	A			1				1				1		2
Q	A							0						0
R	A		1					1						1
S	B1				1			1	3					4
T	A	1	1	1	1			4		1				5
U	A							0		1				1
V	A		1					1						1
TL		18	11	11	4	1	1	(46)	4	10	1	5		66

* Technical Problems: dictionary did not download.

OPTIONS:

A = READS TEXT FIRST

B1 = READS QUESTIONS FIRST, THEN DOWNLOADS THE TEXT & BEGINS TO ANSWER

B2 = READS QUESTIONS FIRST, READS THE WHOLE TEXT, & THEN BEGINS TO ANSWER

R = Related to questions

N = Non-related to questions

USE OF DICTIONARY: HOW MANY WORDS , WHEN & WHERE

Table D4

SESSION 3: Newspaper

		GENERAL COMPREHENSION TASK				DETAILED COMPREHENSION TASK												
						TEXT						Sub Total	QUESTIONS			FEEDB.	OTHER	Total
		TEXT		GQ	Feed	Before doing Qs		When doing Qs		When Feed			Only Qs	When Text	When Feed			
ST	Option	R	N			R	N	R	N	R	N							
A	B1	1						2				2		1			1	5
B	B1	1						2				2		2	1			6
C	B1							2	8			10		2	1			13
D	B2							4	4			8		2				8
E	B2							5	3			8		1			1	10
F	B3							3	1	1		5						5
G	B1			1				3	2			5		3				9
H	B1									1		1						1
I	C							2				2		2				5
J	B1															1		1
K	A					2	2					4				1		4
L	B1	1								2	1	3		1				5
M	A				1						1	1			1			3
N	B1							1				1				1		2
O	A					2	10					12				1		13
P	A											0						0
Q*	B1											0		2				2
R	D							1				1				1		2
S	B1									1		1						3
T	B1			1				7	2			9		2				12
U	B1							2	3			5		1		1		7
V	B1							1				1		1				2
TL		3		2	1	4	12	35	23	5	2	**(81)**		20	3	6	2	**118**

* Technical Problems: dictionary did not download.

OPTIONS:

A = READS TEXT FIRST

B1 = READS QUESTIONS FIRST, THEN DOWNLOADS THE TEXT & BEGINS TO ANSWER

B2 = READS QUESTIONS FIRST, READS THE WHOLE TEXT, & THEN BEGINS TO ANSWER

B3 = READS QUESTIONS FIRST, READS PART OF THE TEXT & THEN BEGINS TO ANSWER

C = DOWNLOADS QUESTIONS & TEXT AT SAME TIME, BEGINS TO ANSWER

D = ANSWERS QUESTIONS WITHOUT READING TEXT

R = Related to questions / N = Non-related to questions

Table D5

SESSION 4: Newspaper

	Option	DETAILED COMPREHENSION TASK											OTHER	Total
		TEXT						Sub Total	QUESTIONS			FEEDB.		
		Before doing Qs		When doing Qs		When Feed			Only Qs	When Text	When Feed			
ST		R	N	R	N	R	N							
A	A			1	2			3						3
B	B1			5	0			5						5
C	A			5	3			8		2	1			11
D	A			4	3			7					1	8
E	A							0		1				1
F	B2		4	2				6		1				7
G	B1			6	9			15	1	2				18
H	A			1				1						1
I	A							0						0
J	A							0			1			1
K	A		3	1				4		1				5
L	B2							0						0
M	A				1			1						1
N	B1			1	1			2						2
O	A	2	3					5						5
P	A							0						0
Q*	A							0						0
R	A							0						0
S	A	1						1						1
T	A			3	1			4		1				5
U	A			3				3						3
V	A			1				1						1
TL		3	10	33	20			**(66)**	1	8	2		1	**78**

OPTIONS:

A = READS TEXT FIRST

B1 = READS QUESTIONS FIRST, THEN DOWNLOADS THE TEXT & BEGINS TO ANSWER

B2 = READS QUESTIONS FIRST, READS THE WHOLE TEXT, & THEN BEGINS TO ANSWER

R = Related to questions

N = Non-related to questions

Table D6

SESSION 1: Radio

	Option	DETAILED COMPREHENSION TASK											OTHER	Total
		TEXT: transcript or subtitles						ORAL TEXT	QUESTIONS			FEEDB.		
		Before doing Qs		WHEN DOING QS		When or after Feed			Read Qs	When doing task	When Feed			
ST		R	N	R	N	R	N							
A	A									2				2
B	A									1				1
C	A								3			2		5
D*	A													0*
E	A									1				1
F	A													0
G	A									5				5
H	A													0
I	A													0
J	A									1				1
K	A		1											1
L	A	1	1							1				3
M	A													0
N	A									1				1
O	A	1		1						1				3
P	A													0
Q	A													0
R	A													0
S	A													0
T	A			1					1	2				4
U	A									1				1
V	A													0
TL		2	2	2					4	16		2		**28**

* None, maybe due to previous Technical Problems in Newspaper

OPTIONS:

A = ST. LISTENS TO THE WHOLE NEWS ITEM FIRST

Table D7

SESSION 2: Radio

		GENERAL COMPREHENSION TASK				DETAILED COMPREHENSION TASK												
						TEXT: transcript or subtitles						ORAL TEXT	QUESTIONS			FEEDB.	OTHER	Total
		TEXT: trans / subt.		GQ	Feed	Before doing Qs		When doing Qs		When or after Feed.			Read Qs	When doing task	When Feed			
ST	Option	R	N			R	N	R	N	R	N							
A	B							2					2	2				6
B	B			1	1									3				5
C	B			2								**2**	4	1		2		11
D	B																	0
E	B												4	2				6
F	B			1									1					2
G	B											**1**		5				6
H	B												1					1
I	B		1											1				2
J	B																	0
K	A													1				1
L	A			1		1		1	1									4
M	B												2	1				3
N	B									1	1							2
O	A									3	2			1	1			7
P	B																	0
Q	B												1	1				2
R	B																	0
S	A						1	1		1				1				4
T	B	1		1				1						3				6
U	B			1										2				3
V	B	1																1
TL		2	1	7	1	1	1	5	1	5	3	**3**	15	24	1	2		72

OPTIONS FOR DOING DETAILED COMPREHENSION TASK:

A = ST. LISTENS TO THE WHOLE NEWS ITEM FIRST

B = ST. READS QUESTIONS FIRST, THEN LISTENS TO THE WHOLE NEWS ITEM FIRST

Table D8

SESSION 3: Television

	Option	DETAILED COMPREHENSION TASK												
		TEXT: transcript or subtitles						ORAL TEXT	QUESTIONS			FEEDB.	OTHER	Total
		Before doing Qs		When doing Qs		When or after Feed.			Read Qs	When doing task	When Feed			
ST		R	N	R	N	R	N							
A	A			1										1
B	A							?-1						2
C	A							2		2				4
D	A									0				0
E	A									1				1
F	A													0
G	A							2		4				6
H	A							1	1					2
I	A													0
J	A			4										4
K	A									1				1
L	A					2	3						1	6
M	A								2					2
N	A									1				1
O	A									1				1
P	A													0
Q	A													0
R	A													0
S	B													0
T	A									2				2
U	A									1				1
V	A									1				1
TL				5		2	3	7	3	14			1	35

* Technical Problems: dictionary did not download.

OPTIONS:

A = ST. LISTENS TO THE WHOLE NEWS ITEM FIRST

B = ST. READS QUESTIONS FIRST, THEN LISTENS TO THE WHOLE NEWS ITEM FIRST

(?) = WORD HEARD BY ST BUT NOT IN TEXT

Table D9

SESSION 4: Television

		GENERAL COMPREHENSION TASK				DETAILED COMPREHENSION TASK											OTHER	Total
						TEXT: transcript or subtitles						ORAL TEXT	QUESTIONS			FEEDB.		
		TEXT		GQ	Feed	Before doing Qs		When doing Qs		When or after Feed			Read Qs	When doing task	When Feed			
ST	Option	R	N			R	N	R	N	R	N							
A	B							1										1
B	B											?		1				2
C	B								1				1					2
D	B													2				2
E	B																	0
F	B																	0
G	B													4				4
H	B																	0
I	B													1				1
J	B																	0
K	B									1								1
L	B							1						1				2
M	B												1	1				2
N	A									1								1
O	A									2	1			1				4
P	A																	0
Q	B																	0
R	B																	0
S	A															1		1
T	B													1				1
U	B														1			1
V	A				1	1		1										3
TL					1	1		3	1	4	1	1	2	12	1	1		28

OPTIONS FOR DOING DETAILED COMPREHENSION TASK:

A = ST. LISTENS TO THE WHOLE NEWS ITEM FIRST

B = ST. READS QUESTIONS FIRST, THEN LISTENS TO THE WHOLE NEWS ITEM FIRST

(?) = WORD HEARD BY ST BUT NOT IN TEXT

WORDS FROM TEXTS LOOKED UP IN DICTIONARY

Here is a list of the words from the texts which were looked up by students. It includes the number of students who looked them up and their relevance to the questions. Relevance is understood here in terms of their direct (DR) or indirect (IR) relation to the questions as explained in point 6.2.3
We do not include words which are included both in the texts and the questions as we consider those words obviously directly relevant for performing the task of answering the questions.

Session 1: Newspaper - TEXT		
Word	No of sts	Relevant
drawn up	10	IR
bolster	9	DR
avert	6	DR
wheeze	6	NO
overspending	5	DR
cutbacks	4	DR
raided	4	IR
ward	3	IR
worse off	3	DR
funding / fund	2	DR
budgets	2	DR
boost	1	DR
painless	1	NO

Session 1: Radio - TEXT		
Word	No of sts	Relevant
publicise	2	DR
resource	2	NO
keen	1	NO
tackling	1	NO

Session 2: Radio - TEXT		
Word	No of sts	Relevant
harness	4	DR
audit	3	NO
deputy	2	DR
galvanise	2	IR
streamline	2	DR
Constable	1	DR
charity	1	DR
supremo	1	NO
resources	1	DR
agency	1	IR

Session 2: Newspaper - TEXT		
Word	No of sts	Relevant
burgeoning	10	NO
brothel	10	DR
fund /funding	7	DR
lack	6	DR
deal with	5	NO
draw up	4	NO
forthcoming	3	NO
chief	3	DR
rise	2	DR
chair	2	NO
role	1	DR
deputy	1	NO
headlines	1	DR
confident	1	NO
regrettably	1	NO
aid	1	NO
soft	1	DR
rejected	1	DR
forward-thinking	1	NO

Session 3: Newspaper - TEXT		
Word	No of sts	Relevant
tackle	11	DR
recruit / recruitment	10	DR
hail	9	DR
boost	9	NO
nought	6	NO
workload	5	DR
harsh	4	IR
spearheads	4	NO
back	3	DR
back up	3	DR
relentless	3	DR
take up	3	NO
slick	3	NO
launch	3	NO
headships	3	NO
spell	3	NO
commercial	1	DR
challenging	1	DR
pupil	1	DR
applicants	1	DR
train	1	DR
targets	1	IR
aware	1	NO
ship	1	NO
pottery	1	NO
lecturer	1	NO
wider	1	NO
private	1	NO
school	1	NO
midfielder	1	NO
website	1	IR
media	1	DR

Session 4: TV - TEXT		
Word	No of sts	Relevant
jostle	4	DR
heckler	2	DR
unfazed	1	DR
ostracizing	1	DR
treat	1	NO
minder	1	NO

Session 3: TV - TEXT		
Word	No of sts	Relevant
makeover	3	DR
nerdy	2	DR
struggle	2	DR
get across	1	DR
dull	1	DR
scarce	1	DR
uphill	1	DR
mould	1	NO
stardom	1	NO
worthwhile	1	NO
launch	1	NO

Session 4: Newspaper - TEXT		
Word	No of sts	Relevant
barracked	8	NO
strengthen	7	DR
goad	6	NO
will	4	DR
jeer	3	NO
civilities	3	DR
smooth	2	NO
rough	2	NO
blame	2	DR
sensitive	2	DR
bring about	2	DR
sharp	2	IR
handshake	1	IR
hold	1	DR
committed	1	NO
depart	1	NO
approvingly	1	NO
lasting	1	NO
seize	1	NO
waiting	1	NO
scum	1	NO
oath	1	NO
loyalist	1	NO
shame	1	NO

Table CN1

SESSION 1: Newspaper

📖 Consulted when reading text ? Consulted when doing questions ✔ Consulted when doing feedback

	Rel.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	Total
OPTION		**B1**	**A**	**B1**	**B1**	**B1**	**B1**	**B2**	**B1**	**A**	**B1**	**B2**	**B1**	**B2**	**B2**	**A**	**B1**	**B1**	**B1**	**B1**	**B2**	**B1**	**B2**	
CN																								
NHS	Y		📖	?	?	?	?	📖	?	📖	?		?	📖	✔		?			?	📖		📖	16
MoD	Y	?	📖	?	?	?	?	📖			?		? ?	📖	📖	?	?		?	?	📖 📖	?	📖	18
Chancellor	Y		📖	?	?	?		?				?	?	📖							📖			9
Tony Blair	N		📖			?		?																3
Gordon Brown	N		📖			?		📖				📖		📖	📖		?		?		📖	?	📖	11
Conservative	Y		📖		?	?								📖		📖	✔			?	✔	?		9
Frank Dobson	N		📖			?								📖	📖		?				?	? ?		7
Whitehall	Y	?	📖					📖				📖 /?	?	📖		📖	?					? ?	📖	10
Treasury	N					?		📖				📖			📖						📖	?		6
Budget	Y					?		📖			?	📖			📖				?			?	📖	8
Margaret Beckett	N							📖				📖		📖			?					?		5
Institute for Fiscal Studies	N	?	📖							📖		📖 /?	?								📖			6
DTI	N	?	?		?	?		?		📖		📖	?	📖	📖	?	?				📖	?	📖	15
British Nuclear Fuel	Y	?	📖			?		?				📖	?	📖		?					📖			9
TOTAL CN (14)		5 (36%)	11 (78%)	3 (21%)	5 (36%)	11 (78%)	2 (14%)	11 (78%)	1 (1%)	3 (21%)	3 (21%)	9 (64%)	7 (50%)	10 (71%)	7 (50%)	5 (28%)	8 (57%)	0 (0%)	3 (21%)	3 (21%)	10 (71%)	9 (64%)	6 (42%)	131 (35.7%)

Table CN2

SESSION 2: Newspaper

	Rel.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	Total
TRANSCRIPT		🗎	🗎		🗎	S	S			🗎			🗎	🗎	🗎	🗎	S	S	🗎	🗎	🗎	🗎	🗎	
OPTION		A	A	A	A	A	B1	A	A	A	A	A	B2	A	B2	A	A	A	A	B1	A	A	A	
CN																								
Home Office	N	?	🕮	🕮	🕮	🕮			🕮		🕮	🕮	🕮	🕮	🕮	🕮	🕮				🕮	?	🕮	16
Soft drugs	Y		🕮		🕮	🕮		🕮		🕮	🕮	🕮	🕮	🕮		🕮					🕮	?		12
Rehabilitation for Addicted Prisoners Trust	N		* 🕮		* 🕮	🕮				🕮		🕮	🕮	* 🕮	🕮		🕮		*		* 🕮	?	*🕮 ?	12
Release	N		🕮		🕮	🕮		🕮 ?		🕮		🕮	🕮	🕮	🕮	🕮	🕮		🕮		🕮	?	🕮 ?	15
TOTAL CN (4)		1 (25%)	4 (100%)	1 (25%)	4 (100%)	4 (100%)	0	2 (50%)	1 (25%)	3 (75%)	2 (50%)	4 (100%)	4 (100%)	4 (100%)	3 (75%)	3 (75%)	3 (75%)	0	1 (25%)	0	4 (100%)	4 (100%)	3 (75%)	55 (50%)

🗎 Consulted transcript in Radio Item

? Consulted CN when doing questions 🕮 Consulted CN when reading text

***Sts had already consulted CNs in the transcript of Radio Item**

Table CN3

SESSION 3: Newspaper

🕮 Consulted CN when reading text ? Consulted CN when doing questions

	Rel.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	Total
OPTION		B1	B1	B1	B2	B2	B3	B1	B1	C	B1	A	B1	A	B1	A	A	B1	D	B1	B1	B1	B1	
CN																								
Tony Blair	Y		🕮										?	🕮		🕮					?		?	6
Eton	N		🕮 ?	?	🕮	🕮		?		?			?	🕮	?	🕮	🕮	?			? ?	?		14
Fettes College	N	?	? ?	?	🕮	🕮		?	?	?			?	🕮		🕮	🕮	?			?	?	?	16
Downing Street	N		?		🕮	🕮	?						?	🕮		🕮					?			8
Teaching Agency	N		? ?	?	🕮	🕮	🕮		?			🕮	?	🕮 🕮	?	🕮	🕮	?			?	?		15
NASUWT	Y	?	? ? ?	?	🕮	🕮 ?	?	?	?	?		🕮	?	🕮 🕮 ?	?	🕮	🕮 ?	? ?		?	? ?	? ? ?	? ?	20
TTA	N	?	? ?	?	🕮	🕮	🕮	?	?	?	?	🕮		🕮 ?		🕮	🕮			?	?	?	?	18
Ofsted	Y		? ? ?	?	🕮	🕮	🕮	?		?	🕮		?	🕮 🕮 ?	?	🕮	🕮	?		?	?	?	?	18
ATL	Y		? ? ?		🕮	🕮	?							🕮			🕮					?	? ?	8
NUT	Y		? ? ?		🕮	🕮	🕮 ?	?				?		🕮 ?	?		🕮				?		? ?	11
TOTAL CN (10)		3 (30%)	10 (100%)	6 (60%)	9 (90%)	9 (90%)	7 (70%)	6 (60%)	4 (40%)	5 (50%)	2 (20%)	4 (40%)	7 (70%)	10 (100%)	5 (50%)	8 (80%)	8 (80%)	5 (50%)	0	3 (30%)	9 (90%)	7 (70%)	7 (70%)	134 (60%)

Table CN4

SESSION 4: Newspaper

📄 Consulted transcript in Radio Item 🕮 Consulted CN when reading text ? Consulted CN when doing questions ✔ Consulted CN when doing feedback

	Rel.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	Total
TRANSCRIPT		S	📄			S	📄					📄	📄	📄	📄	📄	S	📄			S	📄	📄	
OPTION		A	B1	A	A	A	B2	B1	A	A	A	A	B2	A	B1	A	A	A	A	A	A	A	A	
CN																								
Sinn Fein	Y		?		?	🕮				🕮			🕮	*							🕮	*		6
Gerry Adams	Y		? ?		?	🕮							🕮	*								*		4
Belfast	Y		?		?	🕮							🕮								🕮			5
Martin McGuinness	N	🕮	? ? ?	🕮	?	🕮	🕮	?	🕮	🕮			🕮				🕮	🕮🕮						12
Stormont	N	🕮🕮	?	🕮	?	🕮	🕮	?					🕮	*	?	*	🕮	🕮				*		11
Lloyd George	Y	🕮	? ? ?	🕮🕮	?	🕮		?				?	🕮 ✔	*	✔	*	🕮 ?				?	*	🕮 🕮	12
Michael Collins	Y		?	🕮🕮	?	🕮		?					🕮 ✔		✔		🕮				?		🕮	10
David Trimble	Y		?	🕮	?	🕮							🕮	*			🕮	🕮				*		7
Ulster Unionist	N		?		?	🕮				🕮			🕮	*			🕮					*		6
John Hume	Y		?	?	? ?	🕮		?					🕮	🕮			🕮	* 🕮				*		9
SDLP	N		?		?	🕮							🕮	*		*	🕮	* 🕮				*		6
TOTAL CN (11)		3 (27.2%)	11 (100%)	6 (30%)	11 (100%)	11 (100%)	2 (18%)	5 (45.4%)	1 (9%)	3 (27.2%)	0	1 (9%)	11 (100%)	1 (9%)	3 (27.2%)	0	8 (72.7%)	5 (45.4%)	0	0	5 (45.4%)	0	2 (18%)	88 (36%)

***Sts had already consulted CNs in the transcript of TV Item**

KEY to TABLES TSR

ABBREVIATIONS:

T= Consults Transcript information.
S = Consults Subtitles information.

LBQ = Listening before questions

Y = Yes (listens to or watches whole extract without help)
SUBT = listens to or watches whole extract with subtitles
TRANS = listens to or watches whole extract with transcript

2? = twice to ask a question to observer/tutor
2X = twice coming from newspaper
1D = once to access the dictionary

4Q = four times while doing comprehension questions (answers or reads them)
1Q(p) = use it once partially while doing questions
1Q(cn) = once while doing questions and checks cultural note
2befQ = twice before doing questions
1QwT = once when doing questions with transcript

1F= once when doing feedback
1afterF= once after doing feedback
1F(p) = once partially when doing feedback
1aF(T-cn) = once after doing feedback, with transcript, consults cultural note
5aFTD = five times, after feedback with transcript to look up a word in dictionary
1FwT = once when doing feedback with transcript

2N = twice taking notes.
1afterRQ = once after doing retrospective questions
1Vo = once to modify the volume
1P-P = to ask for pen and paper.
1# = once to open the *Display* in the radio console

3T = three times checking transcript.
1S = once when having subtitles running
1wT = once with Transcript
1wS = once with Subtitles

OPTIONS

A = Listens to or watches news item and then reads questions
B = Reads questions and then listens to or watches news item

Note: The numbers in this key equal the number of times the help facilities are used by students.

USE OF TRANSCRIPT – SUBTITLES – REPLAY – PAUSE– REWIND – FAST-FORWARD: How many times

SESSION 1: Radio: DETAILED COMPREHENSION QUESTIONS **Table TSR1a**

Student	TECH. Problems	INFO	Whole w/o help	REPLAY (Whole)	TRANS. (Whole) W/L	TRANS. (Whole) R only	TRANS. (Partial) W/L	TRANS, (Partial) R only	SUBTITLES	PAUSE /STOP	REWIND / FFW	EXPTS
A 1			Y						1befQ	2?+4Q+1D	13Q	
B 2		S	Y							11N+2befQ+6Q+2F	12befQ +6Q+2X+1F	
C 3		T/S	Y	2befQ						1?+10Q+2F	5befQ+2Q+1F	
D 4			Y	1Q					1Q			END
E 5	crashed		SUBT						1befQ +1Q +2Q(p)	1Q	7Q	
F 6			Y	1Q +1F	1Q		1Q		1Q(p)	3Q	3Q	
G 7			Y							14Q+2D	19Q	
H 8			Y	1Q		1afterF				1Q	9Q	
I 9			Y							3Q	4Q	
J 10	crashed		Y	2Q						1Q	1?+1Q	
K 11			SUBT	1befQ	1befQ	1befQ		3Q+2F	1befQ	1?+1		
L 12		T/S	Y						1befQ	3Q+2D	4Q	
M 13			Y		1afterF					1#+1Q+3F	2Q+2F	
N 14			Y	2befQ						3N+4Q	2Q	
O 15		T	TRANS		2befQ			1Q		5Q	1befQ+4wT+6Q	END
P 16			Y	1Q					1befQ			
Q 17			Y	1Q					1Q+1Q(p)	4Q	13Q	
R 18			Y	1Q								END
S 19		T	SUBT					1F	2befQ			
T 20		T	Y					1Q	1befQ	12Q+1D	15Q	
U 21			Y	2Q						1Q+2F	3Q+1F	
V 22			Y	1Q				1Q	1befQ	1S+8Q	1S+17Q	

SESSION 1: RADIO -TASK PROCESS **Table TSR1b**

1st time Listening 1	Reading DCQs 2	Answering DCQs 3	Reviewing answers 4	Feedback 5	After feedback 6
	Reads DCQs (answers some) 2A	Listens to whole extract & answers DCQs at same time 3A		Feedback without listening without transcript 5A	
Listens to whole extract without trans/subt 1A		Listens to bits, rew/ffw/pause & answers DCQs 3B	Listens & reviews answers 4A		Listens to whole or part of extract without trans/subt 6A
Listens to whole extract with transcript 1B	Reads DCQs while listening (answers some) 2B	Listens to extract & answers DCQs at same time, sometimes using rew/ffw/pause 3C		Feedback listening without transcript 5B	
Listens to whole extract with subtitles 1C		Listens with subtitles & then answers DCQs 3D	Reviews answers without listening 4B		
Listens to whole extract pause/rew/ffw 1D	Reads DCQs & answers 2C	Listens with transcript & answers DCQs 3E		Feedback checking transcript 5C	
Listen to bits of extract:pause/rew/ffw 1E		Reads whole or part of transcript while answering DCQs 3F	Listens with subtitles & reviews answers 4C		Listens to whole extract with transcript 6B
	Listens & follows DCQs 2D	Listens & then answers some or all DCQs 3G		Feedback listening using transcript 5D	

Table TSR1c

STUDENTS' TASK PROCESSES IN SESSION 1: RADIO

A	1A + 1C + 2B + 3B + 3C + 3C + 4B + 5A
B	1A(n) + 1D(n) + 1D(n) + 2B + 3B + 4A + 5B + 5A
C	1A(n) + 1A(n) + 1E(n) + 2A + 3B + 3B + 5A 5B
D	1A + 2A + 3D + 3A + 4B + 5A
E	1C + 2A + 3D + 3D(p) + 3D(p) + 3B + 4B + 5A
F	1A + 2A + [3D(p)] + 3E + 3F + 3A + 3B + 5A + 6A
G	1A + 2B + 3B + 3B + 3B + 5A
H	1A + 2A + 3C + 3A + 3B + 5C
I	1A + 2A(p) + 3B + 5A
J	1A + 2A + 3G + #¿* + 3A + 4A + 5A
K	1A(p) + 1C + 1A + 1B + ReadT + 2C + 3F + 2C + 3F + 2C + 3F + 5C
L	1A + 1C(p) + 1C + 2A + 3C + 5A
M	1A + 2A + 3G + 5B + 5A + 6B
N	1A(n) + 1E(n) + 2A + 3C + 5A
O	1A(p) + 1B(p) + 1B + ReadT(p) + 2A + 3B + 3F + 4A(p) + 5A
P	1A + 1C + 2A + 3G + 5A +
Q	1A + 2A + 2D + 3B + 4C + 4C(p) 5A
R	1A + 2A + 3A + 5A
S	1C + 2A(n) + 3D + 5C
T	1A + 1C + 3B + 3F + 3B + 3F + 3B + 3F + 3B + 3F + 5A
U	1A + 2A + 3C + 3C + 3B + 5A + 6A
V	1A + 1C + 2B + 3B + 3F + 5C

(n) = takes notes (p) = not complete, partial #¿* = computer crashes ReadT = reads transcript

To be read in conjunction with TSR1b

USE OF TRANSCRIPT – SUBTITLES – REPLAY – PAUSE– REWIND – FAST-FORWARD: How many times

SESSION 2: Radio: GENERAL COMPREHENSION QUESTION **Table TSR2a**

Student	EXPERTS BEF START	INF	LBQ (no help)	REPLAY (Whole)	REPLAY (Partial)	TRANS. (Whole) W/Listen	TRANS. (Whole) Reads only	TRANS. (Partial) W/Listen	TRANS. (Partial) Reads only	SUBTITLES	PAUSE	REW/ FFW	ANSWER CHOSEN (order)
A 1			1	1befQ +1Q						1Q			B
B 2			1	1Q							1P-P+1Q	1Q	C-B
C 3	Y		1	1befQ	1Q						2befQ-N	1befQ	C-A-B
D 4			1			1befQ		1Q	1Q				A-B
E 5			1	1Q									B
F 6			1	1Q									A-C-B
G 7			1	1Q							2Q	1Q	A-B
H 8			1										B
I 9			1			1befQ			1befQ		1w/T -D		C-B
J 10			1										B
K 11			1	1Q							1Q		B
L 12		Sub	1							1Q-N			A-C-B
M 13			1										B
N 14			1								3Q-N	1bef Q +2Q	A-B
O 15			1		1Q						1Vol +1Q		A-B
P 16			1	1befQ									B
Q 17			1							1befQ	1S	1S	A-B
R 18			1				1befQ			1befQ			B
S 19			1wS			1Q				1-beg			B
T 20			1	1befQ									B
U 21	Y		1	2Q									A-B
V 22			1	1Q		1befQ				1befQ			A-B

USE OF TRANSCRIPT – SUBTITLES – REPLAY – PAUSE– REWIND – FAST-FORWARD: How many times

SESSION 2: Radio: DETAILED COMPREHENSION QUESTIONS **Table TSR2b**

Student	TECH. Problems	OPTION	REPLAY (Whole)	TRANS. (Whole) W/Listen	TRANS. (Whole) Reads only	TRANS. (Partial) W/Listen	TRANS, (Partial) Reads only	SUBTITLES	PAUSE /STOP	REWIND / FFW	EXPERTS
A 1		B	2Q				1Q	1Q	1Q	6Q	
B 2		B		1F			6F	1Q (partial)	14Q + 1F	11Q	MIDDLE
C 3		B							5Q +2D	5Q	
D 4		B	3Q				2F				
E 5		B	1F					1Q	3Q	3Q	
F 6		B	2Q +1F		1F			1Q	4Q	4Q +1F	
G 7		B							24Q + 2D	35Q	
H 8		B	2Q						3Q	9Q	AT END
I 9	crashed	B					1F		5Q	2Q	
J 10		B	1Q +1F						3Q		
K 11		A	1befQ +1F						3Q +1D	6Q	
L 12		A	1befQ		1Q	4Q	1Q	1Q	4Q		
M 13		B	2Q	1aF					1Q+1aF(T-cn)	3Q	
N 14		B	1Q				1afterRQ		5Q	3Q	
O 15		A	1befQ	1aF		2F			3Q+2F+3aFT+5aFTD	5Q+2F+6aFT	
P 16		B	1Q					2Q	1Q	3Q	
Q 17		B						1Q			
R 18		B	1Q								
S 19		A		1befQ			1befQ+ 5Q +2F				AT END
T 20	crashed	B					5Q		10Q+3T	14Q	
U 21	crashed	B	2Q	1aF					1		
V 22		B					1Q(cn) +1Q		5Q+1F	9Q+1F	AT END

SESSION 2: RADIO -TASK PROCESS

Table TSR2c

1st time Listening 1	Reading GCQs 2	Listening to answer DCQs 3	Option	Listening Option A 4	Reading DCQs 5	Listening to answer DCQs 6	Reviewing answers 7	Feedback 8	After feedback 9
		Listens to whole extract 3A		Listens to whole extract without trans/subt 4A	Reads DCQs (answers some) 5A	Listens to whole extract & answers DCQs at same time 6A		Feedback without listening without transcript 8A	Listens to whole or part of extract without trans/subt 9A
Listens to whole extract without trans/subt 1A		Listens to whole extract with transcript 3B	Option A Listens then reads	Listens to whole extract with trans 4B		Listens to bits, rew/ffw/pause & answers DCQs 6B	Listens & reviews answers 7A		
Listens to whole extract with subtitles 1B		Listens to whole extract with subtitles 3C		Reads Transcript 4C	Reads DCQs while listening (answers some) 5B	Listens to extract & answers DCQs at same time, sometimes using rew/ffw/pause 6C		Feedback listening without transcript 8B	
Listens to whole extract with transcript 1C	Reads GCQ 2A	Listens to beginning / bit of extract 3D				Listens with subtitles & then answers DCQs 6D			Listens to whole extract with transcript 9B
Listens to whole extract using pause/rew/ffw 1D		Listens to whole extract using pause/rew/ffw 3E			Reads DCQs & answers 5C	Listens with transcript & answers DCQs 6E		Feedback checking transcript 8C	
Reads transcript 1E		Reads part of transcript 3F	Option B Reads then listens			Reads whole or part of transcript while answering DCQs 6F	Reviews answers without listening 7B		
		Answers DCQ 3X			Listens & follows DCQs **5D**	Answers some or all DCQs without listening **6G**		Feedback listening using transcript 8D	Reads transcript 9C

STUDENTS' TASK PROCESSES IN SESSION 2: RADIO — Table TSR2d

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USE OF TRANSCRIPT – SUBTITLES – REPLAY – PAUSE– REWIND – FAST-FORWARD: How many times

SESSION 3: Television: DETAILED COMPREHENSION QUESTIONS **Table TSR3a**

Student	INFO	Whole bef DCQs w/o help	REPLAY	TRANSCRIPT (Whole) W/Listen	TRANSCRIPT (Partial) Reads only	SUBTITLES	PAUSE /STOP	REWIND /FFW
A 1		Y	1befQ – 2Q			1Q	4Q	9Q
B 2		Y					25Q – 1F	27Q- 1F
C 3		Y	1befQ				18Q – 2D – 1F	26Q – 2F
D 4		Y		2Q			2Q	2Q
E 5		Y	1befQ – 1Q	1Fbef Exp			1D – 3Q	5Q
F 6		Y	1Q				2F	5Q –3F
G 7		Y					27Q	34Q –1F
H 8		Y	1Q –1F				6Q –6F	17Q –3F
I 9		Y					4Q	1Q
J 10		Y			2Q	1Q	11Q	6Q
K 11		Y	1befQ –1Q – 1F	1F			4Q –1D – 1F	2befQ – 4Q – 3F
L 12		Y	1Q	1Fbef Exp	1F	1befQ – 2F	1? – 3Q – 5FwT	3befQ –2Q – 5FwT
M 13		Y	2Q	1afterF			1Q – 3FwT	5Q – 1FwT
N 14		Y	1Q				8Q – 2D	3Q
O 15		Y		1F			1befQ – 1FwT	2befQ – 1FwT
P 16		Y	1befQ –1Q					1Q
Q 17		Y	2Q			1Q		
R 18		Y	1Q					
S 19		Y (DCQs)	1Q				3Q – 2F	4Q – 2F
T 20		Y			2Q	1Q	11Q	13Q
U 21		Y	2Q	1F			1Q	5Q
V 22	S	Y	1Q			2Q	2Q	1Q

1st time 1 Watching	Reading DCQs 2	Answering DCQs 3	Reviewing answers 4	Feedback 5	After feedback 6
	Reads DCQs (answers some) 2A	Watches whole extract & answers DCQs at same time 3A			
Watches whole extract without trans/subt 1A		Watches bits, rew/ffw/pause & answers DCQs 3B	Watches (following DCQs) & reviews answers 4A	Feedback without watching without transcript 5A	Watches whole or part of extract without trans/subt 6A
Watches whole extract with trans 1B	Reads DCQs while doing the exercise 2B	Watches extract & answers DCQs at same time, sometimes using rew/ffw/pause 3C		Feedback watching some/whole extract checking answers (without transcript) 5B	
Watches whole extract with subt 1C		Watches with subtitles & then answers DCQs 3D	Reviews answers without watching 4B	Feedback checking transcript without watching 5C	Watches whole extract with subtitles 6B
Watches whole extract pause/rew/ffw 1D	Follows DCQs whiles watching extract. 2C	Watches with transcript & answers DCQs 3E			
Watches bits of extract:pause/rew/ffw 1E		Reads whole or part of transcript while answering DCQs 3F	Watches with transcript (following DCQs) & reviews answers 4C	Feedback: reads explanations while watching 5D	Watches whole extract with trancript 6C
	After reading DCQs, watches without following qs. 2D	Answers some or all DCQs without watching 3G		Feedback watching with subtiltes 5E	
		Watches whole extract, sometimes using rew/ffw/pause following DCQs 3H		Feedback watching with transcript 5F	Reads or checks transcript 6D
		Watches whole extract following DCQs 3I			

STUDENTS' TASK PROCESSES IN SESSION 3: TELEVISION

Table TSR3c

A	1A	+	1A	+	2A	+	3D(n)	+	3C	+	3A	+	3A(p)	+	3B	+	5A(n)								
B	1A	+	2B	+	3B	+	3B	+	3B	+	3B	+	5A												
C	1A	+	1D(n)	+	2B	+	3B(n)	+	3B	+	3B	+	4B	+	4A(p)	+	5B								
D	1A	+	2A	+	3E	+	3G	+	4C	+	4B	+	5A												
E	1A	+	1A	+	2A	+	3C	+	3B	+	4B	+	4A	+	5F	+	5A								
F	1A	+	2C	+	3C	+	3A(p)	+	3C	+	5B	+	5C												
G	1A	+	2B	+	3B	+	4A(p)	+	5B																
H	1A	+	2A	+	3C	+	3B	+	3C	+	4A	+	5B(n)												
I	1A	+	2A	+	3G	+	3B	+	5A																
J	1A	+	2A	+	3D*	+	3F(p/n)	+	3G	+	3B	+	3F(p)	+	3C	+	4B	+	5A						
K	1A	+	1D	+	2A	+	3B	+	3B	+	5B(p)	+	5B	+	5D	+	5F								
L	1A	+	1E	+	1C(n)	+	2A	+	3C	+	5A(p)	+	5E(n)	+	5F(n)	+	5A(n)	+	6B(n)	+	6D(n)				
M	1A	+	2A	+	2C	+	3H	+	3G	+	5A	+	6C												
N	1A	+	2A	+	3C	+	5A																		
O	1A	+	2A	+	5A	+	6C(n)																		
P	1A	+	1A	+	2A	+	3C	+	3G	+	5A														
Q	1A	+	2A	+	2C	+	3D	+	3G	+	3I	+	3F	+	3G	+	4B	+	5A						
R	1A	+	2A	+	2D	+	3G	+	5A																
S	2A(n)	+	2C	+	3H(n)	+	3C	+	3G	+	5B														
T	1A	+	2A	+	3D	+	3B(p)	+	3F	+	3C	+	3F	+	3G(p)	+	5A								
U	1A	+	2A	+	3C	+	3G	+	3C	+	3G	+	3B	+	4A	+	5A(n)	+	6C(n)						
V	1A	+	1C	+	2A	+	3C	+	3G	+	3B	+	3B	+	3D	+	4B	+	5A						

(n) = takes notes (p) = not complete, partial *st does not answer

To be read in conjunction with TSR3b

USE OF TRANSCRIPT – SUBTITLES – REPLAY – PAUSE– REWIND – FAST-FORWARD: How many times

SESSION 4: Television: GENERAL COMPREHENSION QUESTION **Table TSR4a**

Student	EXPERTS BEF START	INF	LBQ (no help)	REPLAY (Whole)	REPLAY (Partial)	TRANS. (Whole) W/Listen	TRANS. (Whole) Reads only	TRANS. (Partial) W/Listen	TRANS. (Partial) Reads only	SUBTITLES	PAUSE	REW/ FFW	ANSWER CHOSEN (order)
A 1			1		1Q						1Q		A
B 2			1		1Q – 1F						1Q –2F	2Q –1F	C-B-A
C 3			1										C-A
D 4			1		1befQ						1Q		A
E 5			1		1Q						1Q		C-A
F 6			1										C-A
G 7			1	1befQ	1Q						1Vol – 1Q		A
H 8			1										B-A
I 9			1										B-A
J 10			1										B-C-A
K 11			1	1Q									C-B-A
L 12	S		1										C-B-A
M 13			1										B-A
N 14			1		1Q						1Q		B-C-A
O 15			1								1Vol		C-B-A
P 16			1										C-B-A
Q 17			1										A
R 18			1										B-A
S 19			1		1Q						1Q		C-A
T 20			1	1Q							1Q	1Q	C-B-A
U 21			1	1Q	1F								B-C-A
V 22			1	1Q									B-A

USE OF TRANSCRIPT – SUBTITLES – REPLAY – PAUSE– REWIND – FAST-FORWARD: How many times

SESSION 4: Television: DETAILED COMPREHENSION QUESTIONS **Table TSR4b**

Student	TECH. Problems	OPTION	REPLAY (Whole)	TRANS. (Whole) W/Listen	TRANS. (Whole) Reads only	TRANS. (Partial) W/Listen	TRANS, (Partial) Reads only	SUBTITLES	PAUSE /STOP	REWIND / FFW	EXPERTS
A 1		B	3Q					1Q(p)	2Q-1D	4Q –1F	
B 2		B					2Q		31Q –1D	23Q	
C 3		B							11Q - 1D-8F	8Q - 10F	
D 4		B	2Q								
E 5		B	2Q					1F		1Q	
F 6		B	2Q – 1F(p)	1F					3Q –1F	1F	
G 7		B	1Q(p)						15Q-1D	15Q	
H 8		B	2Q						8Q	7Q	
I 9		B							6Q	4Q	
J 10		B	2Q						11Q	3Q	
K 11		B	3Q – 1F	1F					3Q	4Q	
L 12		B	1Q	1Q –1F	1F			1befQ	2QwT – 1FwT	1FwT	
M 13		B	2Q	1F	1afterF				4Q -1FwT	2Q	
N 14		A	1befQ(p)				1F		11Q –3F	6Q –3F	
O 15		A	2befQ - 1Q		1afterF			1afterF	4befQ– 2Q –2S	7befQ – 9Q	
P 16		A	1befQ–2Q					1Q	2Q	4Q	
Q 17		B			1Q			1Q			
R 18		B									
S 19		A	1befQ –1Q						5Q – 1F	6Q –1F	
T 20		B	1Q(p)					1Q	11Q	14Q	
U 21		B	2Q							3Q	
V 22		A		1Q				1befQ	8Q – 1F	8Q –1F	

SESSION 4: TELEVISION -TASK PROCESS

Table TSR4c

1st time Listening 1	Reading GCQs 2	Listening to answer DCQs 3	Option	Listening Option A 4	Reading DCQs 5	Listening to answer DCQs 6	Reviewing answers 7	Feedback 8	After feedback 9
		Watches whole extract 3A		Watches whole extract without trans/subt 4A	Reads DCQs (answers some) 5A	Watches whole extract & answers some DCQs at same time 6A		Feedback without watching without transcript 8A	Watches whole or part of extract without trans/subt 9A
Watches whole extract without trans/subt 1A		Watches whole extract with transcript 3B	Option A Watches then reads	Watches part of the extract without trans/subt 4B		Watches bits of extract, rew/ffw/pause & answers DCQs 6B		Feedback watching without transcript 8B	
		Watches whole extract with subtitles 3C		Watches whole extract with subtitles 4C		Watches extract & answers DCQs at same time, sometimes using rew/ffw/pause 6C	Listens & reviews answers 7A		
	Reads GCQ 2A	Watches beginning /half / bit of extract 3D				Watches with subtitles & then answers DCQs 6D			Watches whole extract with subtitles 9B
		Watches whole extract using pause/rew/ffw 3E			Reads DCQs while watching (listening) 5B	Watches with transcript & answers DCQs 6E		Feedback reading / checking transcript 8C	
Watches whole extract with subtitles 1B		Reads part of transcript 3F	Option B Reads then watches			Reads whole or part of transcript while answering DCQs 6F	Reviews answers w/out listening 7B	Feedback watching using transcript 8D	
		Answers GCQ 3X				Answers some or all DCQs without watching 6G			Watches whole extract with transcript 9C
						Watches whole extract, pauses & answers 6H			
						Watches following DCQs (no answer) 6I		Feedback watches while reading explanations 8E	
					Reads DCQs & answers 5C	Watches without following DCQs (no answer) 6J		Feedback reads results, but doesn't check answers 8F	Reads or checks transcript 9D

STUDENTS' TASK PROCESSES IN SESSION 4: TELEVISION

Table TSR4d

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USE OF EXPERTS : what & when

Table EXP1

ST	1st time			2nd time		
	When	**Skill**	**Which questions**	**When**	**Skill**	**Which questions**
A	Beginning SESSION 1	Reading	Q3 -Tony			
B	Middle SESSION 2 (when reading qs in task)	Listening	Q3 -Tony	Middle SESSION 4	Reading	Q3 & Q4 sub – Sheena
C	Middle SESSION 2	Listening	Qs 1/ (5 /6 /4)* - Sheena Qs (5 /1)* - Tony			
D	End SESSION 1 (while doing Radio Feedback)	Listening	Q4 – Sheena / Q6 - Tony			
E	Beginning SESSION 1	Reading	Q3 sub - Tony	Beginning SESSION 4	Listening	Q7 & Q7 sub – Tony
F						
G	Beginning SESSION 3	Reading	Q4 sub – Tony			
H	Middle SESSION 2	Listening	Q7 – Tony	Middle SESSION 4	Reading	Q7 & Q4 – Tony / Q4 – Sheena
I	End SESSION 4	Reading	Q2 – Sheena / Q2 - Tony	End SESSION 4	Listening	Q4 – Sheena / Q4 - Tony
J	Beginning SESSION 3	Reading	Q2 – Tony			
K						
L	Beginning SESSION 3	Reading	Q1 – Sheena / Q5 - Tony	Beginning SESSION 3	Listening	Q8 & Q8 sub – Sheena
M						
N						
O	Beginning & End of SESSION 1	Reading & Listening	Reading:Q4 – Tony / Q4 – Sheena Listening: Q7 Sheena	Middle SESSION 3 (3rd time)	Listening	Q8 sub – Sheena / Q8 sub (x2) –Tony
P	Beginning SESSION 1	Reading	Q2 – Sheena / Q3 – Tony			
Q	Beginning SESSION 3	Reading	Q8 – Sheena / Q8 – Tony			
R	End SESSION 1	Listening	Q1 / Q5 & again Q5 sub – Sheena / Q3 - Tony	End SESSION 1	Reading	Q3 – Tony / Q5 - Sheena
S	Middle SESSION 2	Listening	Q2 & Q7 – Tony / Q7 - Sheena	End SESSION 4	Listening	Q4 Q6 Q8 – Sheena / Q5 Q7 - Tony
T						
U	Middle SESSION 1 (while doing Newspaper Feedback)		Q3 Tony & Sheena	Beginning SESSION 2	Listening	Q1 sub & Q4 - Sheena
V	Middle SESSION 2	Listening	Q1 sub & Q4 sub - Tony	Middle SESSION 3	Reading	Q8 – Sheena

Demographic background of learners

AGE					
	N	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
AGE	22	19	50	26.55	7.03

Table Dem1

GENDER					
		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	*Female*	13	59.1	59.1	59.1
	Male	9	40.9	40.9	100.0
	Total	22	100.0	100.0	

Table Dem2

Mother Tongue					
		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	*Spanish*	10	45.5	45.5	45.5
	Catalan	8	36.4	36.4	81.8
	Both	4	18.2	18.2	100.0
	Total	22	100.0	100.0	

Table Dem3

Linguistic Level

ST	IALS Placement	Cloze test	Listening Test
A	ADVANCED	94	49
B	INTERMEDIATE	58	46
C	PRE-INTERMEDIATE	34	28
D	INTERMEDIATE	53	44
E	INTERMEDIATE	51	35
F	UPPER-INTERMEDIATE	72	42
G	UPPER-INTERMEDIATE	73	41
H	INTERMEDIATE	46	26
I	INTERMEDIATE	53	31
J	UPPER-INTERMEDIATE	73	44
K	INTERMEDIATE	57	31
L	INTERMEDIATE	47	36
M	UPPER-INTERMEDIATE	81	38
N	ADVANCED	100	80
O	UPPER-INTERMEDIATE	78	44
P	ADVANCED	100	66
Q	INTERMEDIATE	63	28
R	UPPER-INTERMEDIATE	80	61
S	INTERMEDIATE	53	22
T	UPPER INTERMEDIATE	85	35
U	ADVANCED	91	83
V	INTERMEDIATE	53	39

Table L1

	N	*Range*	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
Cloze TEST	22	66	34	100	67.95	18.94
Listening TEST	22	61	22	83	43.14	16.27

Table L2

SILL Questionnaire

Averages of SILL questionnaire

Students	SILL TOTAL	Rem	Men	Comp	O & E	Emo	LwO
A	3,46	2,33	3,71	3,66	3,44	3,33	4,5
B	2,62	2,11	2,35	3	2,66	2,66	3,5
C	3,7	3	3,78	3	4,22	4	4,16
D	3,14	2,88	3	3,83	2,88	3,33	3,33
E	3	2,44	2,28	3,16	3,11	3,33	3,16
F	2,42	2,55	2,14	2	3,11	2,16	2,5
G	3,28	2,66	2,92	4,16	4,22	2,66	3,33
H	3,26	3,11	3,14	3	4	2,5	3,6
I	3,22	2,77	2,85	4,33	2,55	3	4,83
J	3,06	2,66	2,78	3,33	3,44	2	4,5
K	3,14	3,44	2,42	4	3,33	3,16	3,16
L	3,22	3,22	2,85	3,16	3,66	3,16	3,5
M	2,92	3,55	2,57	1,66	3,44	3	3,16
N	3,44	2,55	3,71	4	3,44	3,33	3,66
O	2,56	2,33	2,57	3,5	2,33	2,5	2,33
P	3,46	2,33	3,64	3,5	3,88	2,66	4,83
Q	3,74	2,77	3,85	3,66	4,22	3,5	4,5
R	3,48	2,55	3,71	3,83	3,33	2,66	3,33
S	2,72	3	2,5	4,33	2,55	2,16	2
T	2,5	1,66	1,92	3,83	3,22	2,33	2,83
U	3,72	3	3,71	3,83	3,88	3,83	4,33
V	2,96	2,77	2,64	3,5	3,55	2,16	3,33

Table SILL1

Rem = Remembering effectively, Men = Using mental processes, Comp = Compensating strategies, O&E = Organising and Evaluating, Emo = Managing emotions, LwO = Learning with others

		SILLTOT	COMPTOT	MENTOT	REMTOT	ORGTOT	EMOTOT	LWOTOT	LTEST	CTEST
SILLTOT	Pearson Correlation	1,000	,294	,913(**)	,318	,692(**)	,697(**)	,733(**)	,324	,079
	Sig. (2-tailed)	,	,184	,000	,150	,000	,000	,000	,141	,726
	N	22	22	22	22	22	22	22	22	22
COMPTOT	Pearson Correlation	,294	1,000	,243	-,192	-,106	,076	,149	,128	,074
	Sig. (2-tailed)	,184	,	,275	,392	,640	,736	,509	,569	,745
	N	22	22	22	22	22	22	22	22	22
MENTOT	Pearson Correlation	,913(**)	,243	1,000	,143	,570(**)	,573(**)	,659(**)	,464(*)	,260
	Sig. (2-tailed)	,000	,275	,	,524	,006	,005	,001	,030	,243
	N	22	22	22	22	22	22	22	22	22
REMTOT	Pearson Correlation	,318	-,192	,143	1,000	,261	,299	,010	-,235	-,404
	Sig. (2-tailed)	,150	,392	,524	,	,241	,176	,964	,292	,062
	N	22	22	22	22	22	22	22	22	22
ORGTOT	Pearson Correlation	,692(**)	-,106	,570(**)	,261	1,000	,357	,476(*)	,109	,051
	Sig. (2-tailed)	,000	,640	,006	,241	,	,102	,025	,628	,823
	N	22	22	22	22	22	22	22	22	22
EMOTOT	Pearson Correlation	,697(**)	,076	,573(**)	,299	,357	1,000	,434(*)	,207	-,071
	Sig. (2-tailed)	,000	,736	,005	,176	,102	,	,043	,355	,754
	N	22	22	22	22	22	22	22	22	22
LWOTOT	Pearson Correlation	,733(**)	,149	,659(**)	,010	,476(*)	,434(*)	1,000	,285	,162
	Sig. (2-tailed)	,000	,509	,001	,964	,025	,043	,	,199	,472
	N	22	22	22	22	22	22	22	22	22
LTEST	Pearson Correlation	,324	,128	,464(*)	-,235	,109	,207	,285	1,000	,756(**)
	Sig. (2-tailed)	,141	,569	,030	,292	,628	,355	,199	,	,000
	N	22	22	22	22	22	22	22	22	22
CTEST	Pearson Correlation	,079	,074	,260	-,404	,051	-,071	,162	,756(**)	1,000
	Sig. (2-tailed)	,726	,745	,243	,062	,823	,754	,472	,000	,
	N	22	22	22	22	22	22	22	22	22

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table SILL2

Use of DICTIONARY

		SILLTOT	COMPTOT	LTEST	CTEST	*Dictionary*
SILLTOT	Pearson Correlation	1,000	,294	,324	,079	-,157
	Sig. (2-tailed)	,	,184	,141	,726	,485
	N	22	22	22	22	22
COMPTOT	Pearson Correlation	,294	1,000	,128	,074	,008
	Sig. (2-tailed)	,184	,	,569	,745	,973
	N	22	22	22	22	22
CTEST	Pearson Correlation	,079	,074	,756(**)	1,000	-,210
	Sig. (2-tailed)	,726	,745	,000	,	,349
	N	22	22	22	22	22
Dictionary	Pearson Correlation	-,157	,008	-,168	-,210	1,000
	Sig. (2-tailed)	,485	,973	,456	,349	,
	N	22	22	22	22	22

** Correlation is significant at the 0.01 level (2-tailed).

Table DICT1

Correlations

		CTEST	SILLTOT	COMPTOT	STATE27	TOTMB
CTEST	Pearson Correlation	1,000	,079	,074	-,035	-,210
	Sig. (2-tailed)	,	,726	,745	,879	,349
	N	22	22	22	22	22
SILLTOT	Pearson Correlation	,079	1,000	,294	,239	-,157
	Sig. (2-tailed)	,726	,	,184	,284	,485
	N	22	22	22	22	22
COMPTOT	Pearson Correlation	,074	,294	1,000	,784(**)	,008
	Sig. (2-tailed)	,745	,184	,	,000	,973
	N	22	22	22	22	22
STATE27	Pearson Correlation	-,035	,239	,784(**)	1,000	-,164
	Sig. (2-tailed)	,879	,284	,000	,	,465
	N	22	22	22	22	22
TOTMB	Pearson Correlation	-,210	-,157	,008	-,164	1,000
	Sig. (2-tailed)	,349	,485	,973	,465	,
	N	22	22	22	22	22

** Correlation is significant at the 0.01 level (2-tailed).

Table DICT2

Appendix D:

- Retrospective questions
- Observation worksheet
- Questionnaires:
    - **Personal information**
    - **Evaluation**

RETROSPECTIVE QUESTIONS

NEWSPAPER

GENERAL COMPREHENSION / TIME PRESSURE/ SKIMMING

- Previous knowledge of the item of news:
- Did you have any problem to understand the general idea of the text?
- Did you have time in the two minutes given?

OTHER MEDIA FIRST

- Do you think that the fact of listening to the radio news item first helped you understand the article?
- At the level of vocabulary did it help?
- Did the listening to the radio first help you concentrate on other aspects?

VOCABULARY

- In any instances, did you understand the meaning of all the words individually but you did not understand the meaning of a sentence or paragraph?
- Did you find words you didn't understand but which did not impede comprehension? What did you do?
- What did you do with a word that you didn't know?
- How did you guess it?

DICTIONARY

- Did you use the dictionary? Which one: monolingual or bilingual?
- Why did you use the dictionary?

CULTURAL NOTES

- Did you consult any cultural note?
- Did you do it for curiosity or you needed the information?
- Did you need a cultural note that was not in the text?

APPROACH TO DO THE TASK - OPTION

- Which option did you choose?

EXERCISES

- Did the exercises help you to understand the text?
- In what sense?
- What about the explanations of the wrong answers? Did they help you?
- In what sense?

RADIO

GENERAL COMPREHENSION

- Previous knowledge of the item of news:
- Did you have any problem to understand the general idea of the text?

OTHER MEDIA FIRST

- Do you think that the fact of reading the article first helped you understand the radio item?
- Did reading the article first help you concentrate on other aspects?
- At the level of vocabulary?

VOCABULARY

- In any instances, did you catch individual words but you did not understand a piece of the extract?
- Did you catch words you did not know?

REWINDING / STOPPING

- Did you stop to look up a word?
- Did you rewind?

PRONUNCIATION

- Did you confuse two words due to similar pronunciation?
- Did you have any problems with the accent?

SPEED

- Did you have problems with the speed?

SUBTITLES / TRANSCRIPT

- Did you use the subtitles or the transcript?
- Did you consult how to make good use of the subtitles or the transcript?

EXERCISES

- Did the exercises help you to understand the text?
- In what sense?
- What about the explanations of the wrong answers? Did they help you?
- In what sense?

RETROSPECTIVE QUESTIONS

TV

GENERAL COMPREHENSION

- Previous knowledge of the item of news:
- Did you have any problem to understand the general idea of the text?

OTHER MEDIA FIRST

- Do you think that the fact of reading the article first helped you understand the TV item?
- Did the reading of the article first help you concentrate on other aspects?
- At the level of vocabulary?

IMAGES

- Did the TV images help you to understand?
- In any particular instances did the images help you to understand?

VOCABULARY

- In any instances, did you catch individual words but you did not understand a piece of the extract?
- Did you catch words you did not know?

REWINDING / STOPPING

- Did you stop to look up a word?
- Did you rewind?

PRONUNCIATION / SPEED

- Did you confuse two words due to similar pronunciation?
- Did you have any problems with the accent?
- Did you have problems with the speed?

SUBTITLES / TRANSCRIPTION

- Did you use the subtitles or the transcript? Why?
- When did you use the transcript?
- Did you manage to read the subtitles?
- Have you ever checked the information about how to make good use of the subtitles or transcript in the instructions?

EXERCISES

- Did the exercises help you to understand the text?
- In what sense?
- What about the explanations of the wrong answers? Did they help you?
- In what sense?

GENERAL

TAKING NOTES

- Did you take notes?

EXPERTS

- Did you consult the Experts? Why/ Why not?
- Did you find what they said useful?

LEARNING

- Did you learn anything?

HEALTH / FEELING

- How are you today?

ANY OTHER COMMENT

Nom _____

- Introducció

Radio

- Escoltar primer cop
- Pregunta de comprensió general
- Opció de treball: A B
- Escoltar per contestar
- Preguntes de comprensió detallada
- Transcripció / Subtítols
- Diccionari

Diari

- Instruccions
- Opció de treball: A B
- Diari (vocabulari I notes culturals)
- Preguntes de detall
- Feedback

Experts

Projecte ImPRESSions

Name _____

Surname _____ Phone number _____
E-mail _____

Studies (degrees)

_____

Profession _____

Mother tongue _____

Other Languages _____

Level (EOI) _____ Teacher _____

Years studying English _____

Schools where you studied it _____

Stays in an English speaking country (holidays, courses)

_____
_____
_____

Computing knowledge: expert ☐ average ☐ poor ☐

_____

Internet use

Professional ☐
Educational (English) ☐
Personal ☐
Entertainment ☐
Other _____

Frequency: daily ☐ weekly ☐ sporadically ☐ others _____

English multimedia CALL use (specify software)

_____

- What did you like the most about the program? Why?
- What did you like the least about the program? Why?
- Do you think that your computer knowledge has helped or hindered you in the use of the program?
- Do you think that the help facilities of the program have helped you comprehend the texts better?

	A lot	Quite	Little	No
Dictionary	☐	☐	☐	☐
Transcript	☐	☐	☐	☐
Subtitles	☐	☐	☐	☐
Cultural Notes	☐	☐	☐	☐
Exercises	☐	☐	☐	☐
Feedback	☐	☐	☐	☐
Possibility to see the same item of news on other media	☐	☐	☐	☐

- Which other help facilities would you add to help you comprehend the oral and written texts?
- What do you think about the Experts Section?
  interesting ☐ unnecessary ☐ useful ☐ not very useful ☐
  Why?
- Have you found the program instructions:
  clear ☐ complete ☐ other_____
  not very clear ☐ insufficient ☐
- Which of the combinations N/R/TV have been the easiest? Which the most difficult? Why?

Newspaper - Radio	Radio - Newspaper
Newspaper - TV	TV - Newspaper

If you had to choose only one combination in order to study, which one would you choose? Why?

- Do you think the amount of time you had in a session influenced the way you worked?
  Yes ☐ No ☐
  If the answer is affirmative, specify in which way:
- Do you think that questions at the end of each text have made you reflect on your way of working ? Have they modified the way you worked?
- Have you felt the need to turn to the help of a tutor while you were working with the program?
- Do you think that this way of study by means of a computer is a valuable tool to improve your level of listening and reading comprehension?
- How would you summarise your experience during the four sessions?
  enjoyable ☐ profitable/useful ☐ frustrating ☐ effective ☐
  stimulating ☐ recreational ☐ amusing ☐ confusing ☐
  others _____

Appendix E:

- Questionnaires: devising Experts' questions
- Advertising Handout: Projecte ImPRESSions

QUESTIONNAIRE 1: teachers

NEWSPAPERS/MAGAZINES

What do you think learners find more difficult when dealing with articles in newspapers magazines ?

	Pre-Intermediate	Intermediate	Upper-Intermediate	Advanced
Background knowledge (topic)				
Culture (socio-cultural kowledge)				
Stylistics (text-type, register...)				
Vocabulary				
Grammar				
Reading sub-skills (scanning, skimming,inferring...)				

The areas stated above cover a wide range of problems. Could you specify in more detail which factors cause more problems. (e.g. headlines, idioms, phrasal verbs, etc)

QUESTIONNAIRE 2: Learners

Level:_____

NEWSPAPERS/MAGAZINES

1. What do you find more difficult when dealing with articles in newspapers/magazines ?

		most difficult			least difficult
Background knowledge (topic)		1	2	3	4
Culture (socio-cultural knowledge)		1	2	3	4
Stylistics (text-type, register...)		1	2	3	4
Vocabulary		1	2	3	4
Grammar		1	2	3	4
Reading sub-skills :	**SCANNING**	1	2	3	4
	SKIMMING	1	2	3	4
	INFERRING	1	2	3	4

The areas stated above cover a wide range of problems. Could you specify in more detail which factors cause more problems. (e.g. headlines, idioms, phrasal verbs, ...)?

_____

_____

_____

2. If you had your own private tutor what advice would you ask for? Tick if appropriate.

- What can I do when I don't know a word? ☐
- How can I increase my reading speed? ☐
- When can I use skimming? ☐
- When is scanning more appropriate? ☐
- How can I improve scanning? ☐
- How can I guess the meaning of a word? ☐

Please add others:

_____

_____

Thank you for your co-operation.

Projecte **ImPRESSions**

És un **projecte de recerca** sobre a l'ús que els estudiants d'anglès fan d'un programa multimèdia.

ImPRESSions es un programa dissenyat per ajudar-te a millorar la teva comprensió auditiva i lectora en anglès, i per desenvolupar les teves estratègies d'aprenentatge.

Participa-hi!

Què cal:

- ser **estudiant** de **4t** o **5è** d'**anglès** de l'E.O.I. n2 de Barcelona.
- **coneixements bàsics d'ordinador** a nivell usuari.

Què obtindràs:

- **pràctica d'anglès** a nivell **auditiu** i de **lectura**, que et pot ajudar per la preparació de l'examen de final de curs.
- aprenentatge de **vocabulari** (com *phrasal verbs*), i de diversos temes de la **cultura** i la societat **britànica**.
- coneixement i desenvolupament d'**estratègies d'aprenentatge**.
- l'honor de haver participat en un projecte de recerca per l'avenç en el coneixement de l'aprenentatge d'idiomes en general, i en particular, de l'aprenentatge assistit per ordinador.

Què has de fer:

- **un test de nivell** escrit i auditiu (màxim un hora):

Dies:	dimecres 21	12 -13 h	18-19h
	dijous 22	12 -13 h	18-19h

- **dos qüestionaris** per definir les característiques pròpies com a estudiant d'idiomes (per omplir a casa).

- **quatre sessions** d'un hora de treball individual amb l'ordinador usant el programa multimèdia **ImPRESSions**.

Sessions:	**Matí**	**Tarda-nit**
	10 - 11:30	15:30 -17:00
	12 -13:30	17:30 - 19:00
		19:30 -21:00

Dates: finals d'**abril** i tot el **maig**.

Els estudiants col·laboradors rebran un **informe** segons els resultats del test i els qüestionaris, on es detallarà el seu nivell d'anglès segons el test de nivell de la Universitat d'Edimburg i un anàlisi de les característiques personals com a estudiant d'idiomes.

Gràcies pel teu interès.

Joan-Tomàs Pujolà
I.A.L.S., University of Edinburgh

Appendix F:

Task process samples

- Conventions
- Student A: Session 2 Radio
- Student C: Session 2 Newspaper

ON & OFF SCREEN ACTIONS: CONVENTIONS

ABBREVIATIONS:

On left margin:

C = Cultural Note
D = Dictionary
E = Experts
F = Feedback
S = Subtitles
T = Transcript

On Screen / Off Screen

tx. = text (newspaper article)
q. / qs. = question(s)
q1 = question 1
cn. = cultural note
p. / ps.= paragraph(s)
p1 = paragraph 1
dict. = dictionary
insts. = instructions
def. / defs. = definition(s)
f. = feedback
exp. / exps. = explanation(s)
exp1 = explanation 1
st. / sts. = statement(s)
cptn= photo caption

NUMBERS:

Parameters of visible text:

(hl-5): from headline to paragraph 5 inclusive.
(4.3 - 9.1): from p4 line 3 to p9 line 1

Parameters of visible questions:

(1-3): from question 1 to 3 inclusive.
(2 - 5.1): from question 2 to question 5 line 1

Radio counter:

(00:00 - 01:09) - extract from beginning to 1minute 9 seconds point.

SYMBOLS:

∇ = student's actions
⇒ = computer's actions
= student's verbalisation
= student and teacher interaction
⊗ = synchronised action
| = an ongoing action

[ ] = screen text / oral text (from recordings)
( ) = extra information
{ } = comments
? = action unclear

FONT & SIZES

Arial 10 = actions
Arial 10 italics= text enter by student
Arial 8 = screen text

Times New Roman 10 = TV and radio recordings
Times New Roman 10 *Italics* = students/teacher's voice

ON SCREEN	OFF SCREEN
∇ clicks Radio Icon on homepage ⇒ Radio Contents page downloads	
∇ clicks Item Ts ⇒ Item Ts Radio page downloads	"St : *Crime. Uh! (realises the title Crime on Radio Contents page)* ∇ skims quickly insts.
∇ clicks Close Instructions button ⇒ Instructions disappear ∇ plays (whole extract)	
	"St : *I haven't understood anything, so I will have to listen to it again... I am not with it today. (laughs)*
∇ clicks Exercise Icon ⇒ General comprehension q. downloads ∇ moves mouse over q. ∇ scrolls q. page down and up ∇ stops recording ∇ starts playing	
S ∇ goes to Subtitles on left margin	
	St: *Wait, wait, wait...* T: *You need to put the subtitles first.* St: *Ah, ok.*
∇ stops recording ∇ clicks Subtitles on left margin ⇒ Subtitles download ∇ clicks Play button ∇ clicks Start button for subtitles ∇ plays (whole extract) with subtitles	
∇ clicks Exercise Icon ⇒ General comprehension q. downloads ∇ no mouse movement ∇ plays (whole extract) ∇ selects 2nd st. (correct) ⇒ feedback message shows.	∇ reads q.
	∇ skim reads feedback message (?) very quickly
∇ scrolls q. page down to Detailed Comprehension questions ∇ moves mouse over instructions ∇ clicks Detailed comprehension Exercise button ⇒ Detailed comprehension qs. Downloads (1-5.1) ∇ no mouse movement ∇ scrolls qs. down (1-7.1) ∇ no mouse movement ∇ scrolls qs. down (1-8.1) ∇ no mouse movement ∇ scrolls qs. down (2-8) ∇ no mouse movement ∇ scrolls qs. down (3-9) ∇ no mouse movement ∇ scrolls qs. down (4-9) ∇ no mouse movement ∇ answers q8 TRUE	∇ reads qs. subvocalising T: *what are you doing?* St: *I'm reading...* T: *the questions?* St: *Yes...(laughs) I'm reading them to myself now.* ∇ keeps on subvocalising qs.
	St : *I'm not sure...*

	∇ moves mouse over q9	
	∇ follows q9 with mouse	∇ reads q9
	∇ scrolls qs. up (1-6.1)	
D	∇ clicks Dictionary on left margin	
	⇒ dict. window pops up (main page)	
	∇ clicks Merriam-Webster	∇ waits for dict. to download (for a while)
		T: *Are you going to look it up right now? Have you tried to guess it first?* St: *Yes..no ..I imagine what it is but,no, no* T: *What have you done? Have you read the sentence a few times?* St: *Yes and I don't know the exact meaning and then I look it up in the dictionary.* T*: Have you tried to guess it or you have gone straight to the dictionary?* St: *No, I haven't tried, I have read it twice and not even using the context..... and rather than getting the wrong idea, well, I look...* T*: ok*
	∇ minimises dict. window	
	∇ moves mouse to q2	∇ reads q. (2?)
	∇ plays [The Government has confirmed...	∇ listens to the extract
	∇ answers q2 TRUE	
		⊗ reads q. (3?)
	∇ rewinds ...until now] [campaign against drug abuse... ⇒ message pops up: No se puede abrir sitio Internet http://www.m-w.com/home.html No se ha podido establecer una conexión con el servidor	
	∇ clicks Aceptar button	
	∇ message disappears	
	∇ moves mouse to and over q3	⊗ reads q. (3?)
	∇ scrolls qs. down (1-7.1)	
		⊗ reads q. (4?)
	∇ no mouse movement	
	∇ goes to answer q4. but she doesn´t	
	∇ rewinds ...what I'd like to change is] [The Governement has confirmed ...	
	∇ no mouse movement	
	∇ moves mouse to q3	
	∇ rewinds ...the director of the rehabilitation] [early next year....	
	∇ no mouse movement	
	∇ moves mouse to q4	⊗ reads q. (4?)
	∇ no mouse movement	
	∇ answers q4 FALSE	
	∇ moves mouse to q6	
	∇ no mouse movement	⊗ reads q. (5 or 6?)
	∇ scrolls qs. down (1-8.1)	
	∇ no mouse movement	
	∇ answers q6 FALSE	
	∇ moves mouse under q7	⊗ reads q. (7?)
	∇ scrolls qs. down (2-8)	
	∇ no mouse movement	
	∇ answers q7 FALSE	
	∇ rewinds ...That will not stop the drugs] [Unit at	

	Pentonville...	
	∇ moves mouse over qs.	⊗ checks q. (7?)
	∇ scrolls qs. down (3-9)	
	∇ moves mouse quickly to q8	⊗ checks q. (8?)
	∇ scrolls qs. down (4-9)	
	∇ moves mouse to q9	⊗ reads q. (9?)
	∇ no mouse movement	
	∇ recording finishes ... treating their addiction]	
	∇ answers q9 TRUE	
	∇ scrolls qs. up (1-5.1)	
D	∇ clicks dict from taskbar	
	⇒ Dictionaries main page downloads	
	∇ clicks Newbury House Dictionary	
	∇ no mouse movement	∇ waits for dict. to download
	⇒ Newbury House Dictionary homepage downloads	
	∇ scrolls dict. homepage down to Search textarea	🗨 St : *I am typing the two words although that maybe not....*
	∇ types *take y* in Search textarea	
	∇ erases *y*	
	∇ types *up*	
	∇ clicks Begin Search button & Sí button	
	∇ no mouse movement	∇ waits for def. to download
	⇒ def. page downloads - message [No words found with that spelling. Below is a list of words that are close to what you entered.]	
	∇ types *take* in New Search textarea	
	∇ clicks Begin Search button & Sí button	
	∇ no mouse movement	
	∇ scrolls def. page down	
	⇒ immediately def. page downloads - message [FOUND:4]	
	∇ scrolls def. page down [Please select one of the following words or if there are many words click on [Next words] to see more of the list. taking / take-home pay / take / give-and-take]	
	∇ clicks take	
	∇ no mouse movement	∇ waits for def. to download
	⇒ def. starts downloading [**take** *v.* **took** or **taken** , **taking, takes 1** to grasp, (syn.) to clench: *He took the baby from his wife´s hands...*]	
	∇ scrolls def. page down little by little	∇ scans def.
	∇ stops scrolling at beginning of entry **32** which is the end of the downloaded entries at this point. [... **32** *phrasal v. sep* **to take s.o.** or **s.t. in**: **s.o.:** to decieve, (syn) to]	
	∇ no mouse movement	∇ waits for def. to finish downloading
	∇ more entries download	
	∇ no mouse movement	
	∇ scrolls def. page down little by little	
	∇ stops scrolling (entry **51 to take shape**... to entry **57 to take up with s.o.**) [... **56** *phrasal v. sep* **to take s.t. up**: to shorten: *She took up the hem on her skirt.* ||*She took it up* to do s.t.: *He took up tennis for the first time last week.* **57** *phrasal v. insep.* **to take up with s.o.:** to start a relationship: *She took up with her new boyfriend last month...*]	

	∇ moves mouse over entries 56/57	∇ reads entries 56/57 ?
	∇ scrolls def. page down a little more [... –n 1 a photographic session: The actors got the...etc]	
	(still on screen entries 56/57)	
	∇ scrolls def. page down to end.	
	(still on screen entries 56/57)	
	∇ no mouse movement	∇ reads def. ? entries 56/57
	∇ minimises dict. window	
	(qs. page (1-5.1))	
	∇ goes to q1	
	∇ moves mouse over take up in q1	∇ tries to identify meaning (?) in context (q1)
	∇ no mouse movement	T: what's the matter? St: : *that is not...it is not the meaning of ....* T: *that the meaning the dictionary gives you is not ...* St: : *no, it is not the one that suits* T: *the meaning that suits the context* St*: yes*
D	∇ clicks dict from taskbar ⇒ dict. window pops up (Newbury House Dictionary – def. of **take:** entry 56 *phrasal v. sep* **to take s.t. up.**. entry **57** *phrasal v. insep*. **to take up with s.o.:** to start a relationship:)	
	∇ goes to scrolls def. up but she doesn´t	
	∇ no mouse movement	∇ reads def.
	∇ scrolls def. up to entry 30 approx.	
	∇ clicks Atrás button ⇒ previous def. page downloads - message [Please select one of the following words or if there are many words click on [Next words] to see more of the list. taking / take-home pay / take / give-and-take]	
	∇ scrolls def. page up [New Search: Begin Search FOUND:4]	
	∇ places cursor in textarea but doesn´t type	∇ wants to type a word(s) but she forgot
	∇ minimises dict. window	
	∇ goes to q3	
	∇ moves mouse over take over in q3	∇ realises the other word(s) was take over
D	∇ clicks dict from taskbar ⇒ dict. window pops up (Newbury House Dictionary – [New Search: Begin Search FOUND:4... of the list. taking / take-home pay / take / give-and-take]	
	∇ clicks Adelante button ⇒ def. page of **take** downloads again (entries 30 –36)	St: *maybe it was 'take'* T: *what are you looking up, now?...* St: : *'take over'* T*: Mhm* *St: the thing is that I didn't know which one it was and..*
	∇ scrolls def. page down little by little	∇ scans def.
	∇ stops scrolling (entries 44 to 51)	
	∇ moves mouse over entry 48 [... **48** *phrasal v. sep* **to take s.t. over**: to carry, transport: *A driver took supplies over to a customer's warehouse.* to take comand: *A new leader took over the government.*]	∇ reads subvocalising entry 48.
	∇ goes to minimise but she doesn´t	
	∇ underlines to take command in entry 48.	St : *...to take command...*
	∇ minimises dict. window.	St: *:now I am going to see which of these two suits*

	∇ goes to q3	
	∇ no mouse movement	∇ reads q3 (?)
	∇ goes to play but she doesn´t	T: *Which one do you thing it is?* St: (laughs) *lets see, I think it is the one... take... "command", isn't it?* T: *take command, mhm* St: "*transportar" (to transport) I don't think so, no...*(laughs)
	∇ plays [The Government has confirmed...Mr Hellawell´s deputy will be]	∇ listens to the extract
	∇ rewinds [The Government has confirmed...campaign against drug]	St : *I am going back!*
		St : *Ayyy*! (annoyed)
	∇ rewinds [The Government has confirmed...	
	∇ no mouse movement	
	∇ scrolls qs. down (1-6.1)	
	∇ no mouse movement	
	∇ scrolls qs. down (1-7.1)	
	∇ answers q5 TRUE	
	∇ scrolls qs. down (1.2-8.1)	
	∇ scrolls qs. down (2-8)	
	∇ no mouse movement	
	∇ scrolls qs. down (3-9)	
	∇ scrolls qs. down (4-9)	
	∇ recording finishes ... treating their addiction]	
	∇ scrolls qs. up (1-6.1)	
S	∇ clicks Subtitles on left margin ⇒ Subtitles download	St : *I am going to see what was...what the job of this good man was.*
	∇ plays & clicks Start button for subtitles [The Government has confirmed...	∇ listens to the extract St : *Now!*
	∇ pauses ...attitudes towards drugs]	
	∇ plays [Mr Hellawell's deputy...	
	∇ stops ...policy. About half]	
	∇ goes to Back button pulldown menu	St : *I'm going back, I can't remember the word!*
	∇ clicks Detailed Questions Tsar Radio ⇒ qs. page download (1-6.1)	
	∇ no mouse movement	∇ reads qs
	∇ scrolls qs. down (2-8)	
	∇ scrolls qs. down (7-9 + Feedback area)	
	∇ no mouse movement	St: *To look up, for example, something related to culture, that is to say, 'càrrecs públics' (jobs in the public sector), where can I look them up?* T: in the dictionary St: *Straight to the dictionary, but the thing is that I cannot remember which word it was (laughs)* *T: well, you can look it up in the subtitles or in the transcription,* St: *I am going to have a quick look at the transcription*
	∇ goes to scroll qs. up but doesn´t	
T	∇ clicks Transcription Icon ⇒ Transcription downloads	

∇ moves mouse over p1
∇ goes to Back button pulldown menu
∇ clicks Detailed Questions Tsar Radio again
⇒ qs. page download (7-9 + Feedback area)

D ∇ clicks dict from taskbar
⇒ dict. window pops up
(Newbury House Dictionary – def. of **take:** entry **44** *phrasal v. sep* **to take s.o.** or **s.t. on.**. entry **51 to take shape.**)

∇ clicks Atrás button
⇒ previous def. page downloads - message
[New Search: Begin Search
FOUND:4 Please select one...etc]
∇ types *Constable* in New Search textarea
∇ clicks Begin Search button & Sí button
∇ no mouse movement — ∇ waits for def. to download
⇒ def. downloads
[**constable** *n.* A police officer, esp. In a small town: *The constable arrested a driver for speeding.*]
∇ follows def. with mouse
∇ minimises dict. window.
∇ goes to qs. (7-9 + Feedback area)
∇ scrolls qs. up (1-5.1)
∇ plays [The Government has confirmed... — ∇ listens to the extract
∇ no mouse movement
∇ answers q1 TRUE
∇ scrolls qs. down (1-7.1)
∇ no mouse movement
∇ rewinds ...correspondent, Kim Catcherside]
[early next year...
∇ stops ...correspondent, Kim Catcherside]

D ∇ clicks dict from taskbar
⇒ dict. window pops up
(Newbury House Dictionary – def. of constable page
New Search: Begin Search)
∇ types *deputy* in New Search textarea
∇ clicks Begin Search button & Sí button
∇ no mouse movement — ∇ waits for def. to download
⇒ def. downloads
[**deputy** *n.* –ties a person, usu. In a police function, given power to act as an official: *The deputy sheriff arrested a thief.*]
∇ goes to qs. (1-7)
∇ no mouse movement
∇ minimises dict. window.
∇ no mouse movement — ∇ reads q3?
∇ answers q3 FALSE
∇ moves mouse over q3 — St: *'statement 3'*
∇ no mouse movement — T: *'statement 3' What's happened?*
∇ moves mouse over q3 — St: *I have heard the word 'deputy'*
T: *Have you heard it or have you read it in the transcription?*
St: *I have heard it, I have heard it...well, I had also read it before but when I heard it, I said: Dear! I thought that it was a 'false friend' (laughs) ...I thought it was a ' diputat'(MP), but is...*

		T: *ok...* St:*... and then I think it is false but I understand that, ...well.* T: *and you have looked it up in the dictionary and you have understood it?* St: *Yes.* T: *and have you answered number 3* St: *the other thing is that I understood number 3, but... well...*
	∇ scrolls qs. down (3-9)	
	∇ scrolls qs. down (4-9)	St: *what doesn't make sense is the meaning.* T: *do you realise that you have 4 dictionaries?* St: *Gosh! You are right! ...Thanks* (laughs)
D	∇ clicks dict from taskbar ⇒ dict. window pops up (Newbury House Dictionary – def. of deputy page - New Search: Begin Search)	
	∇ goes to Atrás button pulldown menu	
	∇ selects Dictionaries	
	⇒ dict. main page downloads	
	∇ clicks Langenscheidt's New College Dictionary	
	∇ no mouse movement	∇ waits for dict. to download
	⇒ Langenscheidt's New College Dictionary main page downloads (Selection: English-German / German-English / English-Spanish / Spanish-English)	
	∇ scrolls dict. page. Down a little	
	∇ selects English - Spanish	
	∇ scrolls dict. page. Down a little more (Look–up-word textarea appears)	
	∇ types *take* in textarea	
	∇ clicks Look up word button & Sí button	
	⇒ def. downloads immediately	
	∇ scrolls def. down to end (Not complete: Output limited to 2048 characters	∇ realises def. is not complete St: *there are no' phrasal verbs'!*
	∇ scrolls def. up a little	
	∇ clicks Atrás button	
	⇒ Langenscheidt's New College Dictionary main page downloads (Look–up-word textarea: *take*)	
	∇ types *over* after *take* in textarea	St: *we'll try, although it says only one word*
	∇ clicks Look up word button & Sí button	
	⇒ message downloads immediately (The word has not been found! You were searching for more than one word!)	
	∇ scrolls message down	∇ skims message very quickly
	∇ clicks Atrás button	St: *well, I'll go back again and look up...to see ifi 'over' (works), I don't think so, but...*
	⇒ Langenscheidt's New College Dictionary main page downloads (Look–up-word textarea)	
	∇ erases *take over* in textarea	
	∇ types *over* in textarea	
	∇ clicks Look up word button & Sí button	*...just in case in the off chance..*(laughs)
	⇒ def. downloads immediately	
	∇ scrolls def. down to end (Not complete: Output limited to 2048 characters)	∇ scans def.
	∇ minimises dict. window.	
	∇ scrolls qs up (2-8) (answer of q3 is already highlighted)	

	∇ no mouse movement ∇ scrolls qs down (4-9) ∇ scrolls qs up (1-8.1) ∇ no mouse movement	St: *I think it is .as it is written in here which probably won't be but... I understand that it is the director who gives him..., who asks him and it is the other way round! (*subvocalises q3*) but well...* T: *What do you mean that he asks him?* St: *oh well, that he orders him.*
	∇ scrolls qs down (6-9 + Feedback area)	St: *let's see, you'll see it now!*
F	∇ clicks Feedback button ⇒ results [7/9=87% - 6 min] (Time is not real since it counts from the last time she accesses the qs. page)	
	∇ scrolls qs page down [Evaluation: Good performance! Next time pay more attention to the tricky questions!]	St: *aeup! Well... let's see which ones are wrong*
	∇ scrolls qs page up (2-8)	∇ checks answers St: *Ah! It was right (*referring to q3*) I can't believe it, I can't believe it*
	∇ scrolls qs page up (1-8.1) ∇ scrolls qs page down (4-9) ∇ scrolls qs page down to explanation area ∇ clicks Explanation of the wrong answers button ∇ scrolls down to exp7 ∇ scrolls exps down to exp5 ∇ no mouse movement	St: *So, the wrong ones are 5...* *....and... 9.* *Ok, then, let's see*
	∇ moves mouse over exp5	∇ reads exp5 subvocalising definition of: streamline St: *That's fixing it somehow, isn't it? to make it more efficient, more effective...it is what I understand.*
	∇ scrolls exps down to exp9 ∇ no mouse movement ∇ scrolls up to qs (8.2 –9 + feedback area) ∇ no mouse movement ∇ scrolls down to exps (5.2 – 9) ∇ no mouse movement ∇ scrolls up to qs (8.2 –9 + feedback area) ∇ no mouse movement ∇ scrolls down to exps (5.2 – 9) ∇ no mouse movement	∇ reads exp9 ∇ reads q9 ∇ reads exp9 ∇ reads q9 ∇ reads exp9? St: *I can't quite understand the 'statement'...,that is, the explanation.* *T: here it says (pointing at NOW on the screen)* *St: Now, Ah! ok, ok...he has the intention but at the moment (he) is not doing, ... ok, ok* *T: Do you understand it now?* *St: Yes, the thing is that I hadn't even seen this' now' well that's it, isn't it?* *T: do you want to do anything else?* *St: No*
	END OF SESSION	

	ON SCREEN	OFF SCREEN
	∇ clicks Newspaper on left margin	St: *Newspaper*
	⇒ Item Ts Newspaper page downloads	
	∇ clicks Read TEXT first button	(no time to read instructions)
	⇒ article downloads (top area) / instructions (bottom of screen)	
	∇ no mouse movement	
	∇ indiscriminate movements	
	∇ places mouse over scrolling down arrow	
	∇ no mouse movement	
	∇ scrolls tx. down (photo-3.1)	
	∇ no mouse movement for a while	
	∇ scrolls tx. down (hl-5)	
	∇ no mouse movement for a while	
	∇ scrolls tx. up (6-11)	
C	∇ moves mouse over cn. Chancellor	
	⇒ cn. downloads left margin	
	∇ no mouse movement	∇ reads cn.
	∇ moves mouse off cn.	
	∇ no mouse movement for a while	∇ reads St: "*there are words, I mean, many words that I read, I was told their meaning and then I forgot ... and this is my fault, I should make cards or things like that... and always have the vocabulary ready, at hand, ...but this is my problem.*"
	∇ scrolls tx. down (9.2-13)	
	∇ no mouse movement	
	∇ scrolls tx. down (2-7.2)	
	∇ no mouse movement	
	∇ scrolls tx. down (5-10)	
	∇ move mouse to p6 and back to scrolling bar	∇ reads & jots down unknown words
	∇ no mouse movement	
	∇ scrolls tx. down (7-12)	
	∇ no mouse movement	
	∇ scrolls tx. down (8.2-13)	
	∇ no mouse movement	
	∇ scrolls tx. down (9.2-13)	
	∇ places mouse over Exercise icon	St: "*Now, ...I don't need to, do I?...this one, here,* (exercise icon).
	∇ goes to left margin	T: *this* (exercise icon), *now whenever you want to you can do the questions, ok?*
	∇ indiscriminate movements	St: *are these the questions?...I thought this was the general comprehension question.*
	∇ goes back to Exercise icon	T: *No, you've already done the general comprehension question because you have done the news at the beginning.. Remember it is the same news.*
	∇ indiscriminate movements	St: *Yes, yes, yes...that's it*
	∇ no mouse movement	
	∇ goes to Dictionary button on left margin	
	∇ goes to get taskbar bottom of screen	
D	∇ clicks dict from taskbar	
	⇒ dict. window pops up: VOX - def. of *stream* (end)	
	∇ clicks Atrás button	

⇒ VOX homepage downloads (*stream* in textarea)
∇ highlights stream
∇ types *deal* in Entrada textarea
∇ types Enter key twice
∇ no mouse movement
⇒ def. begins downloading
∇ scrolls def. down

deal
noun
1. (*agreement*) trato, acuerdo, pacto; (*financial*) acuerdo: it's a deal! , ¡trato hecho! the deal's off!, ¡no hay trato!: management and unions have reached a pay deal, la patronal y los sindicatos han llegado a un acuerdo salarial.
2. (*treatment*) trato: she´s had a bit of a rough

(it has not finished downloading)
∇ no mouse movement
⇒ def. downloads

2. (*treatment*) trato: she´s had a bit of a rough deal, lo ha pasado bastante mal.

∇ scrolls def. down

3. (*amount*) cantidad (*f*), a great deal of money , mucho dinero: she's a great deal better, está mucho major: he learnt a great deal from his father, aprendió mucho de su padre.
4. (*in card games*) reparto: it´s your deal, te toca a ti repartir
transitive verb
5. (*cards*) repartir, dar.
6. (*drugs*) traficar.
intransitive verb
7. (*cards*) repartir, dar.
8. (*drugs*) traficar.

∇ scrolls def. page down

to deal in [...]
to deal out [...]
to deal with [...]
inseparable transitive phrasal verb
1. [COMM] (*trade with*) tratar con, tener relaciones comerciales con.
2 (*tackle – problem etc*) abordar, ocuparse de, atacar; (*-task*) encargarse de, ocuparse de; (*-person*) tartar (con), lidiar con. [...]

∇ keeps scrolling def. page down

dealer [...]
dealing
noun
1. [COMM] (*way of behaving*) negocios (*mpl*).
2. [FIN] transacciones (*fpl*).
plural noun
3. (*relations*) trato, relaciones (*fpl*).
to have dealings with SB, tener trato con ALGN.

∇ keeps scrolling def. page down to end

dealt
pt&pp
1. SEE deal.

∇ clicks Atrás button
⇒ VOX homepage downloads (*deal* in textarea)
∇ highlights deal
∇ types *lack* in Entrada textarea
∇ types Enter key twice
⇒ def. downloads immediately

lack
noun
1. falta, carencia, escasez (*f*) she has no lack of self-

St:" '*deal', I can't remember, ...*(typing) *'frontera'(border) (translating) or something like that*
T: *Press, intro, intro*"

∇ waits for def. to download

St: "…'*dialogo', estar de acuerdo, dialogar ..* "
(he is interpreting the def.)

∇ skim reads def.

St: "… *in this case, it is' negocios'..*"
∇ jots down def

confidence, no no le hace falta confianza en sí misma.
[...]
∇ scrolls def. page down to bottom
lackadaisical [...]
lackey [...]
lacking [...]
lacklustre [...]
lacklustre [...]
∇ scrolls def. page up to top (**lack**)
∇ scrolls def. page down to bottom
∇ jots down falta, carencia
∇ clicks Atrás button
⇒ vox homepage downloads (*lack* in textarea)
∇ highlights lack
∇ no mouse movement
∇ types *forthco* in Entrada textarea
∇ no mouse movement
∇ types *-ming* in Entrada textarea
∇ types Enter key twice
⇒ def. downloads immediately
∇ scrolls def. page down to bottom
forthcoming
adjective
1. *(fml)* (*happening in near future*) próximo, -a: the forthcoming elections, las próximas eleciones: his forthcoming book, su próximo libro.
2. (*available*) disponible,
3. (*relations*) comunicativo, -a, dispuesto, -a a hablar.
∇ no mouse movement
∇ jots down próximo
∇ clicks Atrás button
⇒ vox homepage downloads (*forthcoming* in textarea)
∇ highlights forthcoming
∇ no mouse movement
∇ looks at notes on paper
∇ types *burge* in Entrada textarea
∇ no mouse movement
∇ types *-onint*
St: "(typing) *I think it is burges (bourgeois)...(*typing) *just in case, out of curiosity.*"
∇ no mouse movement
∇ erases *–nt*
∇ types *-ng*
∇ types Enter key twice
⇒ def. downloads immediately
∇ scrolls def. page down to bottom
burgeoning
adjective
1. [LIT] (*flower*) en flor; (*plant, tree*) en brote,
2. [FIG] en ciernes: a burgeoning poet, un poeta en ciernes.
∇ no mouse movement
∇ jots down brotando ≅
∇ clicks scrolling down arrow twice (no page movement, he is at the bottom)
∇ no mouse movement
∇ scrolls def. page up
∇ clicks Atrás button
⇒ vox homepage downloads (*burgeoning* in textarea)
∇ highlights burgeoning
∇ no mouse movement
∇ types *rose* in Entrada textarea
∇ types Enter key twice

⇒ def. starts downloading immediately **rose**[1] noun 1. (*flower*) rosa [...] **rose**[2] past 1. SEE rise.	∇ scan reads def. (he does not realise **rose**[2] entry at first)
∇ scrolls def. page down	
∇ keeps scrolling down to bottom: **rosé** [...] **rosebud** [...] **rose-coloured** [...] **rosehip** [...] **rosemary** [...] **rosette** [...] **rose-water** [...] **rosewood** [...]	
∇ scrolls def. page up to **rose**[2]	
∇ no mouse movement	
∇ scrolls def. page up to top: **rose**[1] noun 1. (*flower*) rosa [...] **rose**[2] past	
∇ scrolls def. page down little by little	∇ scan reads def.
∇ keeps scrolling to bottom	St: "It says '*21 rose', you know, and then it also says 'rose 1,8'*
∇ scrolls def. page up little by little	T: *And then what do you think "rose" means?*
∇ clicks Atrás button	St: (clicking) Well, *I don't know*
⇒ VOX homepage downloads (*rose* in textarea)	(clicking)
∇ highlights rose	St: *of course, it must be "sortir" (come out), mustn't it? Sortir el sol (the sun rises), isn't? or ...no, no, no,*
∇ types *sire* in Entrada textarea	(types) ice
∇ types Enter key twice	T: *Stop, stop: "detener"*
∇ clicks Detener button	
∇ highlights sire	
∇ types *rise* in Entrada textarea	St: *it is this verb...*
∇ types Enter key twice	T: *is it the verb?"*
⇒ def. downloads immediately **rise** noun 1. ascenso, subida. 2. (*increase*) aumento	
∇ immediately scrolls def. page down to bottom 3. (*slope*) subida, cuesta. intransitive verb 4. ascender, subir. 5. (*increase*) aumentar 6. (*stand up*) ponerse de pie 7. (*get up*) levantarse 8. (*sun*) salir 9. (*river*) nacer 10. (*level of river*) crecer. 11. (*mountains*) elevarse. • **to give rise to**, dar origen a. • **to rise to the occasion**, ponerse a la altura de las circunstancias *pt* ***rose****, pp* ***risen*** *['riz□n]*	
∇ scrolls def. page up to top	St: "*that has got?... ascenso(rise) ...* (clicking) *...that the 21 upwards and the 1,8 downwards (translating). Well, ok, I think it is this, but, well...*
∇ goes to minimise dict. but no	
∇ no mouse movement	

–on dict window:
rise
noun
1. ascenso, subida.
2. (*increase*) aumento

∇ scrolls def. page down (entries1-9)
∇ no mouse movement
∇ moves over entries 1/2
∇ no mouse movement for a while

…
St: I don't think it is this, or not, I mean, *'está por encima de los 21', around (translating) but...*
T: *Have you seen it here that it meant this or you have interpreted it?*
St: *I'm making it up ... let's see. No, no,... it is "un aumento hasta los 21(a rise up to 21) and ' un aumento hasta...hasta el 1,8(and a rise up to 1,8) , ok...isn't it?*
T: *I don't know, you tell me.*
St: *This shows that I (laughs) need somebody besides the program (laughs) to understand things.*
T: *so ,you need somebody?* (laughs)
St: *Yes, to help focus things better...this does not mean that the program is bad* (both laugh).
If I make a mistake and misinterpret what it is said in here....yes, it is a 'augment'(an increase)!"

∇ clicks Atrás button
⇒ vox homepage downloads (*rise* in textarea)
∇ highlights rise
∇ types *brothels* in Entrada textarea
∇ erases -s
∇ types Enter key twice
⇒ def. downloads immediately
brothel
noun
1. burdel (*m*).
∇ scrolls def. page down to bottom
brothel- creeper [...]
∇ no mouse movement

∇ clicks Atrás button
⇒ vox homepage downloads (*brothel* in textarea)
∇ highlights brothel
∇ types *chief* in Entrada textarea
∇ types Enter key twice

⇒ def. downloads immediately
chief
noun
1. (*gen*) jefe, -a; (*of party*) líder (*mf*).; (*of tribe*) cacique (*m*).
∇ scrolls def. page down to bottom
2. principal
■ **Chief Constable,** jefe, -a de policía.
■ **Chief of Staff**, jefe (*m*) del estado mayor.

chiefly [...]
chieftain [...]
∇ minimises dict. window
[txt:9.2-13 / qs: insts.]
∇ clicks Exercises Icon
⇒ detailed comp. qs. download (q1)
∇ no mouse movement
∇ scrolls qs down (1-3)

T: "*which other one have you got?*
St: "*brothel" and that is it"*

St: (clicking) *brodal [...]* (laughs)… brothel (clicking) …"

∇ jots down burdel
St: *that's it, OK"*

St:" "*chief" I remember, I have heard it but now...* "

St: "*the questions*"

	∇ no mouse movement	
	∇ indiscriminate movements	(tries to find dict.)
D	∇ access dict. from taskbar	
	⇒ dict. pops up (def. chief –bottom)	
	∇ clicks Atrás button	
	⇒ vox homepage downloads (*chief* in textarea)	
	∇ highlights chief	
	∇ types *tsar* in Entrada textarea	
	∇ types Enter key twice	
	⇒ def. downloads immediately **tsar** noun 1. zar (*m*).	
	∇ scrolls def. page down to bottom **tsarina** noun 1. zarina.	∇ jots down zar
	∇ minimises dict. window [txt:9.2-13 / qs: 1-3.]	
	∇ moves mouse to text	
	∇ no mouse movement	
	∇ scrolls qs up (q1)	
	∇ no mouse movement	
	∇ scrolls qs down (1-2)	
	∇ scrolls tx up (hl-5)	
	∇ no mouse movement	
	∇ goes to pulldown menu q1	
	∇ clicks & highlights True	
	∇ no mouse movement	
	∇ highlights False	
	∇ no mouse movement	
	∇ answers q1 FALSE	
	∇ scrolls qs down (2-4)	
	∇ scrolls qs up (1-3)	
	∇ no mouse movement for a while	
	∇ places mouse over pulldown menu q2	
	∇ no mouse movement for a while	(clicking) subvocalising St: *it is shocking, isn't it?* T: *what is shocking? Is it difficult?* St: *No, no…* T: *what, then?* St: *that you know what everything means and you cannot find the idea, because your mind goes blank or whatever.* T: *Don't worry.* *(you have 10 minutes left or so)* St: *I think I can finish it in 5.* T: *Don't worry"*
	∇ answers q2 FALSE	
	∇ no mouse movement	∇ reads q3?
	∇ scrolls tx down (3.2-8)	
	∇ no mouse movement	∇ reads tx?
	∇ scrolls tx down (6-11)	
	∇ no mouse movement	
	∇ scrolls tx down (9.2-13)	
	∇ moves over tx	

∇ no mouse movement
∇ scrolls tx up (5-10)
∇ no mouse movement
∇ scrolls tx down (9.2-13)
∇ scrolls qs down (9)
∇ scrolls qs up (8-9)
∇ no mouse movement for a while
∇ scrolls qs up (7-9)
∇ points pulldown menu q8
∇ no mouse movement for a while

D ∇ access dict. from taskbar
⇒ dict. pops up (def. tsar –bottom)
∇ clicks Atrás button
⇒ VOX homepage downloads (*tsar* in textarea)
∇ highlights tsar
∇ types *sugests* in Entrada textarea
∇ types *–g-* after *sug-*
∇ types Enter key twice
∇ no mouse movement
⇒ dict. page with possible images (GIF SYMBOL) downloads
∇ clicks Atrás button
⇒ VOX dict. home page downloads (suggests in textarea)
∇ erases *–t-*
∇ types Enter key twice
∇ clicks Detener button
∇ highlights suggess
∇ erases
∇ minimises dict. window
∇ indiscriminate movements

∇ recognises as Resultados de la búsqueda NUEVA BUSQUEDA

"*(clicking/typing)*
St*: 'suggerir'(suggest)...(clicking) I will look it up because I'm not sure (laughs), you know?"*

∇ checks spelling of suggest ?

D ∇ access dict. from taskbar
⇒ dict. pops up (VOX homepage –empty textarea)
∇ no mouse movement
∇ minimises dict. window
∇ scrolls qs up (6-9)
∇ scrolls qs down (7-9)
∇ no mouse movement for a while

"T*: Have you looked it up already?*
St*: No, but it means this.*
T*: in the end, you didn't look it up.*
St*: Well, (laughs) it is as if I had looked it up (laughs) I look it up physically but...*
T*: but you got it right, didn't you?*
St*: yes, but...just in case always, to be sure. 'Sugiere que hay...o sea, que la ... "funding for education" eeea.....las drogas del zar'... és un treball impossible (translating).*
I don't understand ...
T*: Remember you can choose "Don't know"*
St*: Yes, I know...the thing is that it says here that if he refuses it is going to be, it is.. an impossible job?...to put...if it is an impossible job , què ho refusi (translating)?*
T*: where does it say that it is an impossible job?*

St: *'The drugs tzar's job impossible'...up here, here he says that regrettably the government does not want to have anything to do with it and ...*

∇ goes to tx (p13)
∇ no mouse movement

T: *but at the end he says something, doesn't he?*

St: *I see,(translating): regrettably, that's to say, it is one regression, it would be regressive,... si s'intentés que les mans de les drogues, "tzar behind his back", would be going backwards. I tindria a les mans, tenia les mans... la droga el zar.*

∇ goes to qs (q8/9)
∇ no mouse movement

And here it says that (q9) Mr Mike Godman suggests that the refusal of the "funding for education and treatments" of the drugs tsar's jobs, the drugs...of drugs a zar... is an impossible job.
...It is the meaning of the sentence.
...Made the job impossible...ok! (clicking)"

∇ moves mouse over q9
∇ places mouse over pulldown menu q9
∇ no mouse movement
∇ moves over q9
∇ circles over drugs tsar's (q9)
∇ indiscriminate moves over q9 / q8
∇ follows drugs tsar's (q9) a couple of times
∇ goes to tx (p12)
∇ moves over p12
∇ no mouse movement for a while
∇ goes to q9
∇ follows refusing funding
∇ answers q9 TRUE
∇ places mouse over pulldown menu q8
∇ no mouse movement
∇ goes to tx (scrolling up arrow)
∇ no mouse movement
∇ scrolls tx up (6.4-12.2)
∇ no mouse movement
∇ scrolls tx up (4.2-9)
∇ no mouse movement
∇ goes to qs (scrolling bar)
∇ places mouse over pulldown menu q8
∇ no mouse movement
∇ scrolls tx down (6.4-12.2)
∇ scrolls tx down (7-12)
∇ no mouse movement
∇ places mouse over pulldown menu q8
∇ answers q8 TRUE
∇ scrolls tx down (8.2-13)
∇ scrolls qs up (5-8)
∇ moves mouse over qs
∇ goes to tx
∇ scrolls tx up (5-10)
∇ no mouse movement
∇ scrolls qs down a bit (5-8)
∇ no mouse movement
∇ answers q7 TRUE
∇ places mouse over pulldown menu q6
∇ goes to tx (5-10)

∇ places mouse over pulldown menu q6
∇ answers q8 FALSE
∇ goes to tx (5-10)
∇ no mouse movement
∇ scrolls qs down (6-9)
∇ scrolls tx down (7-12)
∇ scrolls qs up (2.2-5)
∇ moves over q5
∇ no mouse movement
∇ points at q4
∇ no mouse movement
∇ scrolls tx up (4.2-9)
∇ answers q4 TRUE
∇ no mouse movement
∇ scrolls qs up (1.2-4)
∇ no mouse movement
∇ moves mouse over q3
∇ no mouse movement
∇ answers q3 FALSE
∇ scrolls qs up to top (1-3)
∇ immediately scrolls qs down (5-8.2)
∇ places mouse over pulldown menu q5
∇ no mouse movement for a while
∇ clicks pulldown menu q5
∇ highlights True
∇ no mouse movement
∇ highlights False
∇ no mouse movement for a while
∇ answers q5 FALSE
∇ scrolls qs down to Evaluation section.

F ∇ clicks Feedback button
⇒ results show
[6/9 = 67% -14 mins. Average score…]

∇ scrolls qs up (1-3)
∇ scrolls qs down
∇ keeps scrolling to the Explanation of the wrong answers button.
∇ clicks Explanation of the wrong answers button.
∇ scrolls exp down (4-5)
∇ no mouse movement for a while

∇ moves over exp.5

∇ follows exp.5

∇ moves over exp.5

∇ no mouse movement for a while

∇ checks ticked/unticked answers
"·St: (clicking) 4, 5, 7, (clicking) …"

St: …"has been controversial" for his ideas… 'hit the headlines'… the head of the headlines, of the news,… isn't it?
T: What?
St: "get a lot of publicity" eeeea.. the question was that the man was very contr...with a lot of controversy, isn't it?
T: And what does it say in here? (referring to exp4)
St: (trying to translate) Ha estat controvèrsia per la seva idea de legalitzar els burdels però…però no es coneix controvèrsies per encoratjar el debat…
T: it is not known whether HE is a controversial figure
St: or whether it is a controversial debate.
T: No, no. that he, 'HE'.
St: if 'he'…o ell (translation) has been controverted to encourage the debate.
T: which debate?

	St: the drug debate... that is, it is not known whether he is controversial himself or to encourage... *T: No, what the sentence says is that he is controversial by the drugs, isn't it?* *St: Yes, because he supports drugs.* *T: and what is said in the text is...?*
∇ scrolls up to qs (top:q1) ∇ scrolls tx up (hl-3.1) ∇ scrolls tx down (4.2-9) ∇ goes to p7 ∇ moves over p7 (cn soft drugs appears twice) ∇ no mouse movement for a while	*St: (looking at the screen) 'Mr Hellawell, 55', must be the age, who is the head of the news with his ideas such as legalising brothels, said...welcomed debates about soft drugs.* *T: So what it says is that he is a controversial figure because he supports the legalisation of brothels and not because he encourages the drug debate..*
∇ scrolls down to exps (4-5) ∇ moves over exps (4?) ∇ no mouse movement ∇ scrolls up to qs (3-6.1) ∇ moves over q4 ∇ scrolls qs down a bit ∇ no mouse movement ∇ scrolls qs down & up (3.2-6) ∇ immediately scrolls down to exps (4-7.3) ∇ scrolls up to qs (5-8) ∇ no mouse movement ∇ moves over q5 ∇ underlines decriminalisation q5 a couple of times ∇ goes to p7 (informed) ∇ goes to q5 ∇ underlines informed way q5 a couple of times ∇ no mouse movement ∇ scrolls down to exps (4-5) ∇ moves over exp5	*St: (looking at exp5 & subvoc) the debate 'to go on and to be informed. Go on, continue ...and knowledge. Yes. He hopes that the debate goes ahead and it is known ...and the question, what was it?...* St: *He thinks that the debate of.... Should, ok, carry on informally.* T: *Informally?* St: *no, no, on the way...* T: *Have you seen what it says in the explanation of "informed"?* St: *Yes, informed*
∇ scrolls up to qs (4-7.1)	T: *Do you understand then?* St: *Yes, but here I have said' false' because the man ...(clicking) here at the end he said so. (blows air) That is to say that, here he does say yes, people need to be informed but then (clicking) here he says... eeeee ... (p8) I have been seeing all these years about the debate that has taken place, has taken place I think that so much descrimini...that is, about what is believed whether it is criminal or rightful that it is not going to help, that it hasn't, it hasn't helped. That is why I have chosen "false".*
∇ scrolls tx down (6.4-12.2) ∇ moves over p7 ∇ moves over p8 ∇ follows p8 ∇ no mouse movement ∇ moves over p8 ∇ goes to q5 & moves over ∇ no mouse movement	T: *But it refers to the sentence above, doesn't it?* St: *I know but he says... that afterwards talking, with*

		time he sees that this, this does not help. T*: here he just says that the debate has to carry on in an intelligible way and that ...(p7)* St: *Ah Ok! yes....that it does not help for the time ...but it does help the debate, yes* *(HE DID NOT UNDERSTAND ANYTHING!!!!!)*
	∇ scrolls qs down (5.2-9) [q7 – unticked]	
	∇ scrolls qs down (7-9) [q7 – unticked]	St *: (clicking)and number 7...he first encourages to cut....the demands against drugs and health problems, doesn't he?*
	∇ no mouse movement	
	∇ scrolls down to exps (5.2 -8) [exp7]	
	∇ no mouse movement for a while	
	∇ goes to tx	
	∇ no mouse movement	
	∇ moves over tx (p10)	
	∇ no mouse movement for quite a while	St*: (clicking) this is what I understood.... the thing is that I don't understand.* T*: what don't you understand?* St*: what he says...that the three main aims of young people are simply to have their demands or general 'supplies'. ' Besides',(trying to translating): sinó que... contràriament, isn't it? or...* *T:(*gives the right translation*): a més!* St: *a més, ... he has never mentioned these aims...* T: *Who's is HE?* St: *Auch, ...it has never been mentioned that...this encouragement...* T: *aims means ' encouragment'?* St: *Yes!?...* T: *Ah, Ok.* St: *No, no it is not...for Mr Hellawells.* St: *Well now you have left me with a doubt about "aims"* *(clicking/ typing - go to dict)* St: *this is my fault because if I don't know what it means* T: *it is nobody's fault.* St: *(laughs)ha!"*
D	∇ access dict. from taskbar ⇒ dict. pops up (VOX dict homepage – empty textarea)	
	∇ types *aims* in Entrada textarea	
	∇ types Enter key twice	
	∇ indiscriminate movements	
	∇ no mouse movement	
	∇ indiscriminate movements	
	∇ goes to minimise but no	
	∇ indiscriminate movements	"T: *I suppose it will come up?*
	∇ clicks Detener button	St: *if not 'aim'...the other dictionary was better*
	∇ erase *-s* in Entrada textarea	
	∇ types Enter key twice	
	∇ no mouse movement	T: *which one, the German one?* St: *Yes...the one that loads into the hard disk.* T: *It doesn't ...it connects to the Internet* St: *Oh, ok! They are Internet dictionaries, aren't they?* T: *Yes"*
	∇ indiscriminate movements	

∇ clicks Detener button
∇ clicks Atrás button
⇒ Dictionaries main page downloads
∇ clicks Langenscheidt's Dict.
∇ no mouse movement
∇ clicks Langenscheidt's Dict. link
⇒ Langenscheidt's dict. downloads
∇ selects English-Spanish radio button
∇ scrolls dict.page down to bottom
∇ scrolls dict.page up to Look up word textarea
∇ types *aim*
∇ types Enter key & clicks sí button
∇ goes to minimise but no
∇ indiscriminate movements
∇ no mouse movement
⇒ def. downloads

aim *s.c.* ***1*** objetivo, fin, finalidad, propósito. *s.i.* ***2*** puntería (con armas). *v.t.*, **[to – at]** apuntar a. ***4*** **[to – at]** dirigir (acciones, palabras, golpes, etc) a. *v.i.* ***5*** **[to – at/for]** aspirar a, ambicionar, pretender. ***6*** **to be aimed at,** estar dirigida a (una actividad o similar) . ***7*** **to take – at,** apuntar a.

∇ no mouse movement

"St: 'finalidad', 'propósito', ok!
T: "objetivo", "finalidad", "propósito"
St: (laughs) ..it is the same one that… meant "objetivo", isn't it?"
END OF SESSION